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BLM Social Effects Project

Community Report:

Wheatland, Wyoming

By:

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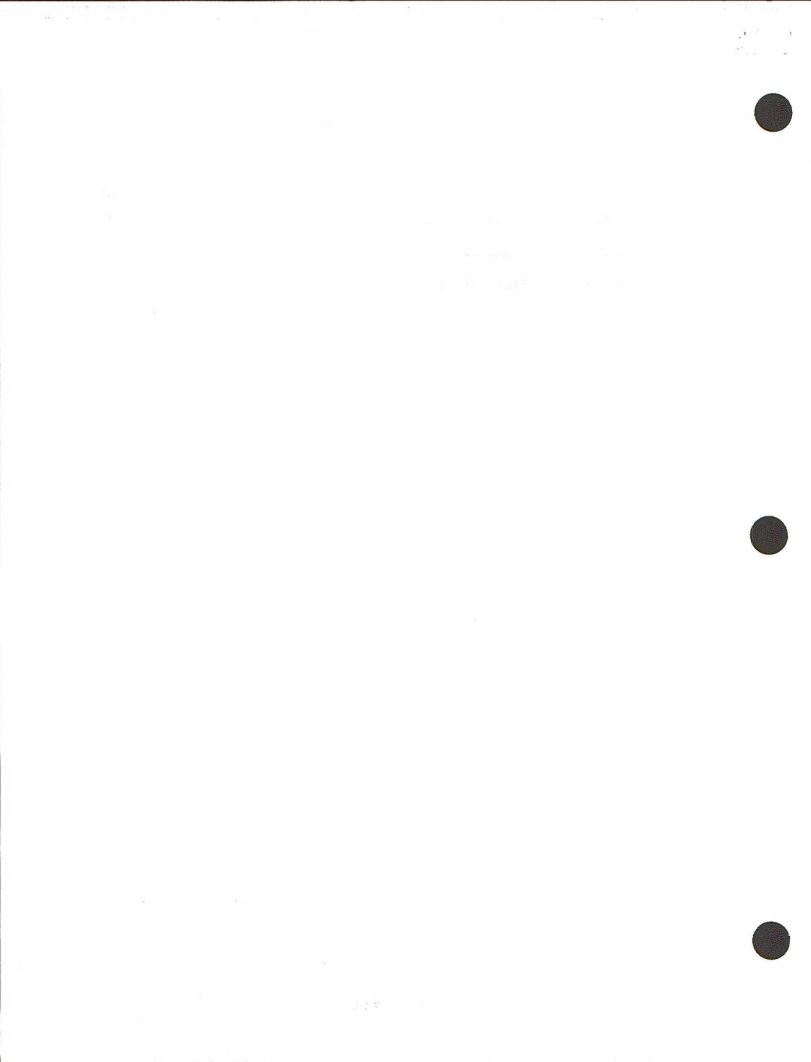
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Chapter I

Introduction

1.1 Background

This report on Wheatland, Wyoming is one in a series of ten community research working papers documenting the field research conducted as part of the BLM Social Effects Project. The project was designed to improve social assessment methods by conducting a literature review and primary research to develop and support a Guide to Social Assessment.

The project had five major components. The first component, a review of the literature, provided the basis for developing an analytic framework for the assessment of social effects of energy development. The literature review was organized into eight major subject areas which included the following:

- social organization
- political organization
- economic organization
- population and demography
- family
- specific groups, including Native Americans, women, and youth
- attitudes, values, and quality of life
- mitigation

The second component, the Social Effects Conference, was held in Denver in October, 1980. The conference brought representatives of state governments, the BLM, and the academic community together to determine what the focus of the project would be. A principal

objective was to integrate the perspectives of decision-makers and sociologists and develop a common set of assessment priorities.

The third component of the project, the research component, was based on the results of the literature analysis and the Social Effects Conference. The priorities identified for study centered on changes in community social organization and indicators of community well-being.

The fourth component of the project was the preparation of a social assessment guide. The Guide is the major product of the project; to ensure its applicability, it was given a trial application under actual field conditions.

The fifth component of the project was a public involvement effort to keep interest groups informed about the project. Meetings with BLM and state officials were held to brief them on the project and to solicit comments. A periodic bulletin was distributed to inform others about the project. In addition, training workshops for BLM social scientists were held to instruct them in the use of the Guide.

1.2 Purposes of the Research Effort

The research component was included in the project to achieve four major objectives:

- To identify social effects, including those suggested by the literature review and conference, and to verify them by field investigation.
- To test the analytic framework which was developed as a basis for the Guide.

- To further elucidate the mechanisms that cause social effects to occur in energy impact areas.
- To test field procedures and the conceptual approach at a level of effort comparable to that available to BLM staff conducting social assessments.

Although there were differences in emphasis among conference participants, seven priority assessment topics were identified as being of greatest concern. These were:

- 1) What is the distribution of socioeconomic effects among groups in impacted areas?
- 2) What determines the capacity of communities to manage growth?
- 3) What are the attitudes of residents, both old and new, toward development?
- 4) What are the effects on community facilities and services?
- 5) What are the major lifestyle and social organization changes resulting from energy development?
- 6) What are effective mitigation strategies?
- 7) How can cumulative social effects be measured or described?

Conference participants also emphasized that BLM needed an assessment method that could handle site-specific variations and that would be compatible with the multi-phase BLM assessment and planning processes.

The research phase was to last nine months and financial resources were limited. Clearly, the research effort could not do justice to all seven of the research priorities summarized above, and it was not the intention of BLM that the research effort provide definitive answers to all social impact questions. The goal was to devise an analytic framework that would produce effective social

assessments given the BLM process and, at the same time, to learn as much about the above areas of concern as the limited resources permitted. Thus, the project team was given the seven research priorities and was asked to create an appropriate analytic framework and method for implementing the research effort.

1.3 The Analytic Framework

Several general criteria guided the development of the analytic framework. The first criterion was to be sure that the subject of the research was clearly social in nature. The BLM believed that enough was known about how to do economic and demographic assessments as well as facilities and services assessments, but that social assessments needed improvement.

Second, if possible, BLM wanted the assessment process to discriminate between social effects that could be mitigated and those that probably could not. Before BLM or state and local entities can require mitigation, the effects must be known and feasible mitigation methods must be understood.

Third, the framework needed to be implementable within a variety of resource constraints. Each assessment effort within BLM has different constraints of time, personnel and funding. Thus, the framework needed to be workable under a variety of conditions.

A final criterion was that the framework should not only enable the forecasting of effects, but also should allow for determining the significance of effects for various populations, i.e., a basis was needed to determine the meaning of social effects.

In response to these criteria, an analytic framework was developed that is based upon the concept of social organization. As used in this project, social organization is a community level concept and is discussed in detail by Wilkinson in the Literature Review (Thompson and Branch, 1981). Basically, it focuses on the social structures and processes of community social organization as the most critical social characteristics potentially affected by energy development.

For general applicability, the four processes of social organization are differentiation, extra-local linkages, stratification, and integration. These are the broad social science labels used to describe these processes. But for purposes of this report, names of the processes have been restricted to those elements of the process which appeared to be of the greatest importance for western energy assessments. These terminology changes have been made in keeping with our intent to make this research report a companion to the Social Effects Guide:

- diversity/complexity (differentiation)
- outside linkages (extra-local linkages)
- distribution of resources/power (stratification)
- coordination/cooperation (integration)

The analytic framework posits that change in the fundamental processes of social organization - complexity/diversity, outside linkages, distribution of resources/power, and coordination and cooperation - are among the most influential social effects of energy development. With the processes of social organization as a central

focus and the desire to forecast social change caused by energy development as the principal objective, the conceptual model shown in Figure 1-1 was developed as the framework which could be used to construct the BLM social assessment guide.

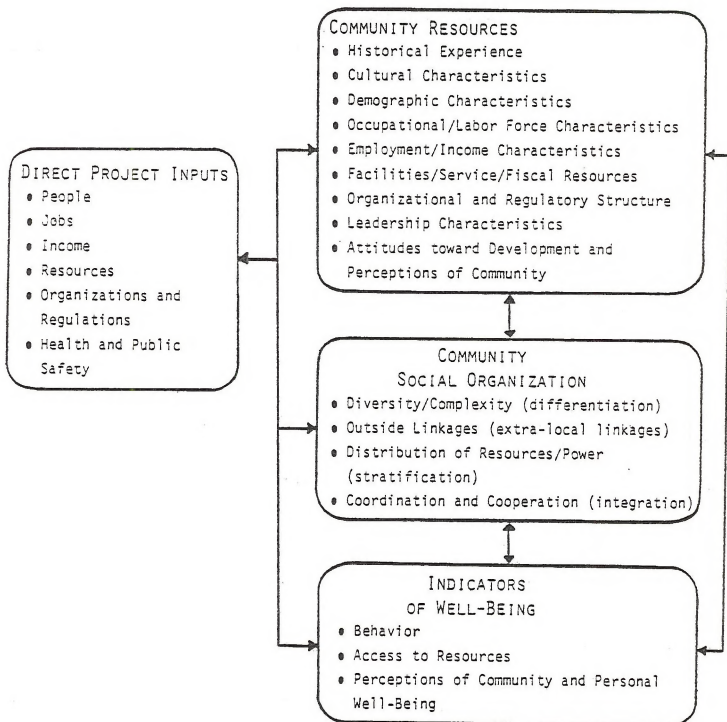
The model, Figure 1-1, has four major components: direct project inputs (projects, leasing decisions, resource management plans), the community's resources, its social organization, and the well-being of individuals in the community and their perception of the community. The normative goal of social assessment is to estimate the effects of exogenous inputs on the well-being of individuals. This involves analysis of the effect of the inputs on the resources available in a community, on the social organization of the community, and finally on the well-being of individuals in the community. It thus specifies the community as an important unit of analysis for the assessment of large-scale projects.

Based on the literature review and the BLM conference results, these four components were thought to incorporate the significant dimensions of social impact assessment. When combined with a theoretical concept of social well-being that addresses the role of the community in serving the social needs of its members, it provides a basis for examining not only the effect of the project upon social organization but also for examining the relationship between social organization and individual well-being.

A principal advantage of the model (Figure 1-1) is that it clarifies the relationship between the social assessment component and the other components of the total assessment process (e.g.,

Figure 1-1

Social Organization Model



economic/demographic, facilities and services, and natural environment). It also makes more explicit the mechanisms by which exogenous inputs modify community resources and social organization, and ultimately, individual well-being -- directly by the primary effect of the inputs, and indirectly by changing interaction patterns among the components.

1.4 Research Design

The research effort consisted of conducting ten comparative community case studies. These were imperative since little secondary data exists for the social variables specified in the model. Further, since the social organization variables have received little attention in western social impact research there was little known about them. Consequently, the case study effort was divided into two phases. The first phase was exploratory in nature and included four communities. More time and effort was allocated to these communities to determine the utility of the model, and to identify major relationships and variables. In the second phase, six more communities were included, but the effort was more focused and fewer resources were expended per community.

As stated above, the analytic framework devised to guide the research, Figure 1-1, dictates that the "community" be included as a unit when assessing the social effects of large-scale projects. This approach suggests that the social meaning of development for members of a social unit, the community, is determined largely by the

interaction of exogenous inputs with the community's resources and its social organization.

Using this approach meant the focus of the research had to be the community itself. It was decided the focus had to be further restricted to rural communities, those with less than 25,000 people. This was important because many of the problems facing BLM are concerned with disruption in rural, western towns. Further, the data had to be mostly primary data collected by the research team in the field, and it was important that the results be as easily generalized as possible. Since in-depth studies of only a few cases could produce misleading results, it was important to include as many cases as possible. Eventually, ten case communities were selected.

To obtain data needed for the four components of the model, two main data sources were identified: unstructured interviews and secondary data available only at the state or local level. The secondary data collected locally were mostly for the inputs and community resource components, and for rates of behaviors. Unstructured interviewing was used for data on social organization processes and the other two major indicators of well-being -- access to resources and perceptions of the community.

Field research teams of two each were used, with ten members of the project team participating. Of these ten members, nine had considerable experience interviewing in energy impacted towns, and rotation of team members among teams was used to minimize interviewer bias. Field instruments and procedures were developed and pretested

by a three-person team before research on the ten communities was initiated.

1.5 Selection of Study Communities

A purposeful sampling of communities in the six-state study region based on the following criteria was decided to be the most effective sampling procedure.

These criteria were:

- 1) The community must have had input from a major energy project between the years 1965 and 1980;
- 2) The energy development impacting the community had to be a mine, a processing plant (or both), or a gas and oilfield development. Employment had to total at least 300 people, since this was approximately the minimum size of projects likely to result from the BLM leasing process. (Although a preference was shown for coal development, other energy activity qualified.);
- 3) The community had to be outside a metropolitan area;
- 4) The energy development had to be past the peak of the construction phase, and preferably, construction had been completed;
- 5) Because of the tremendous differences in legal and organizational structure between the six states, there had to be representation from each state -- preferably two communities from each state; and
- 6) If possible, one of the communities in each state was to be relatively large and one relatively small (compared to the range of community sizes in the six-state area).

The sample:

From the following list of all communities in the six-state region that met these criteria, the communities indicated with an asterisk were tentatively selected for primary field research. (See figure 1-2)

Figures 1-3 and 1-4 are regional maps of the United States which show the six states with the twelve communities selected for study.

Figure 1-2

<u>State</u>	<u>County</u>	<u>Town or Community</u>
Colorado	Delta	Cedaredge
		Delta
		Paonia
	Garfield	Carbondale
		Newcastle
		Rifle
	Gunnison	Crested Butte
		Gunnison
		Pitkin
	Jackson	Walden
Montana	Moffat	* Craig
	Rio Blanco	* Meeker
		* Rangely
	Routt	Hayden
	Rosebud	* Ashland
		Birney
		Busby
		Colstrip
		* Decker
		* Forsyth
		Lame Deer
New Mexico	Colfax	Raton
	McKinley	Gallup
		Thoreau
	San Juan	Aztec
		* Blanco
		* Bloomfield
		Farmington
		Shiprock
	Cibola (formerly Valencia)	* Grants

<u>State</u>	<u>County</u>	<u>Town or Community</u>
North Dakota	McLean	Garrison
		* Underwood
		Washburn
	Mercer	Beulah
		Hazen
	Oliver	* Center
Utah	Carbon	East Carbon
		* Helper
		* Price
		Wellington
	Emery	Castle Dale
		Cleveland
		Emery
		Huntington
Wyoming		Orangeville
	Sevier	* Salina
	Campbell	Gillette
		Wright
	Carbon	Rawlins
		Sinclair
		Wolcott Junction
	Converse	* Douglas
		Glenrock
	Johnson	Buffalo
	Lincoln-Uinta	Evanston
		Kemmerer
	Platte	Glendo
		* Guernsey
		* Wheatland
	Sheridan	Big Horn
		Dayton
		Ranchester
		Sheridan
		Story
	Sweetwater	Green River
		Rock Springs

Figure 1-3

REGIONAL MAP



Figure 1-4

REGIONAL MAP

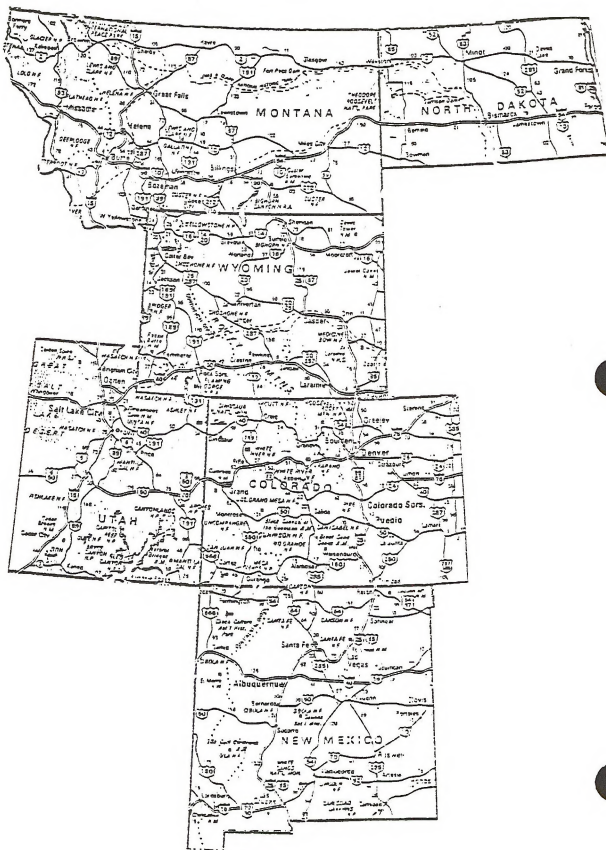


Figure 1-3 shows the location of the study communities, while Figure 1-4 is a more detailed map and includes highways and other cities and towns. Of the twelve communities selected, ten case studies were completed. Some secondary data were collected for Center, North Dakota and Bloomfield, New Mexico, but because of limitations of time and funding, interviews were not conducted for these two communities.

1.6 Field Procedures and Instruments

The field instruments used were semi-structured interview protocol forms which are included in Appendix A. In addition, the field team was given an outline which specified the structure of the community reports. However, because the research was partially exploratory, the structure of the reports was deliberately left flexible to accommodate unexpected observations and findings.

The emphasis in the research was to examine the applicability and veracity of the analytic framework and to determine whether these concepts were workable and effective within the research and data constraints of the assessment process. One of the real questions to be answered by the research was whether the social organization model was operational within Bureau Assessment Conditions.

Field procedures involved several general instructions. MWR and WRC prepared community information packages for each community when possible. This information was given to team members before they visited the community so they would have a knowledge base before they began to interview. Team members were encouraged to schedule the first two or three interviews before going to the community, but were

urged to let their interviews list develop as they worked in the community. For the first four communities, 10 to 16 man-days were allocated for field work; the remaining six communities were allocated 6 to 10 man-days.

The instruments were pretested in Gillette, Wyoming by three senior members of the team. Appropriate revisions were made and the instruments were then retested in Douglas, Wyoming, with another senior member of the team being substituted. This test was satisfactory and the revised instruments were used in the ten study communities. It needs to be stressed, however, that the instruments were not highly structured. Team members, for the most part, were highly experienced in field research and emphasis was placed on acquiring as much information as possible. This was an applied project, not a testing of a well-defined theory, and the emphasis was on increasing the information base.

Interviewers were requested to make detailed notes of interviews; the primary validity of the findings is based on concurrence of the team members. Of the ten field team participants, seven have a Ph.D. in sociology, five had worked on western social impact studies for at least five years, and four had worked in this area for over eight years.

1.7 Limitations and Concepts

Several limitations of the research and the report need to be noted.

First, because there was a high priority on applying the analytic framework to as wide a range of communities as possible, and an interest in utilizing techniques comparable to those that would be employed in the assessment process, the level of effort for research in each community was limited. This, combined with the focus of the research on delineating trends and evaluations of changes in community resources, social organization and social well-being, meant that less effort was expended verifying specific items of information than would have been the case in a more concentrated study of a single community. As a result, readers should be aware that some of the details about the communities may be in error -- for example, dates may not be precise.

Second, in order to rigorously examine the causal relationships between exogenous inputs and community response, the exogenous inputs need to be more clearly specified than this approach allowed. Ideally, an economic/demographic analysis would have been incorporated in the research. However, the specifications of the project and budget and time constraints did not allow a greater economic and demographic effort.

Third, the research reports were developed primarily as working papers to be used by the project team in developing the Summary Research Report and the Guide to Social Assessment. They have been prepared for release because it was felt that they provided valuable information on topics where research results are very scarce. Because of their genesis, the reports do not contain as extensive documentation or referencing as would have been included if they had

been prepared as final, stand alone documents, nor is the prose as polished as it might be.

Nevertheless, these limitations do not necessarily lessen the usefulness of the findings; rather they indicate areas where caution should be exercised in interpreting and applying the results.

1.8 Organization of the Report

This report is organized to correspond with the social organization model, with some accommodation to the need for orientation to the community early-on. The second chapter presents a brief summary of the history of the community and its resources. The third chapter describes the resource development activities in the vicinity of the community. Chapters four through seven discuss the changes that occurred in the social organization of the community as a result of the energy development in the following sequence: 1) differentiation (complexity/diversity), 2) stratification, 3) extra-local linkages, and 4) integration and personal interaction. Chapter Eight addresses the effects of the energy development on various indicators of well-being. Chapter Nine provides a brief overall summary.

Chapter II

Historical Analysis of the Community

2.1 History¹

Like much of Wyoming, Platte County has a rich and varied settlement history. The county was created by the Wyoming State Legislative Assembly in 1911 from what was then Laramie County. Platte County is in the southeastern part of Wyoming, bordered on the north by Converse and Niobrara counties, on the south by Laramie County, and on the west by Albany and Converse counties. Elevation in the county varies from 4,275 to 5,000 feet. Major drainages in the area include the Laramie, North Laramie, and North Platte rivers, and the Sybille, Chugwater, Cottonwood, Horseshoe, Elkhorn, Fish, and Richard creeks. The land area of the county comprises 1,357,400 acres, of which the federal government owns about 122,524 acres or 4.4 percent, while the state and local governments own 279,118 acres or about 10 percent. The remainder is privately owned (Harmston and Lund, A Study of the Resources, People, and Economy of East-Central Wyoming, Wyoming Natural Resource Board, Cheyenne, Wyoming, p. 18, 1963.).

The earliest inhabitants of the Platte County area were probably prehistoric hunters who may have lived in the area as long as 8,000-10,000 years ago. Prehistoric quarries, known as the "Spanish Diggings", have been found in the northeastern corner of the county,

¹The information in this section has been made available from "A Social Impact Assessment of the Proposed Laramie River Station", Department of Sociology, University of Wyoming, December, 1975 by the authors.

supplying evidence of the existence of these early peoples. But even today little is known of the groups which worked these quarries (Wyoming Historical Records Survey Program (WHRSP) No. 16, Platte County (Wheatland), Cheyenne, Wyoming, p. 17, 1939).

Besides these original aborigines, the first people of whom we have much written history are the "Plains Indians". The first permanent settlers were the proto-Pawnees who tilled the soil, made pottery, and lived in partially submerged houses in the valleys. When the first white explorers entered the North Platte River Valley, it was occupied by the Pawnee Indians who had established farm villages and hunted on the adjacent plains (Harmston and Lund, p. 13).

Sometime in the late 1870's, the Sioux were forced out of the forests south and west of Lake Superior by the Chippewas who had received guns from white trappers. The Sioux moved onto the plains, and soon several bands entered the Platte River Valley and began to drive out the Pawnees. The Kiowas who occupied parts of Platte and Goshen counties were also driven away.

The history of the white man in this area is tied to the Platte River Valley which served as a natural thoroughfare for western travelers. One of the first known records of white men in the valley is of a party of seven men, under the leadership of Richard Stuart, who were returning from Oregon in 1812. Fort Laramie, located near the confluence of the Laramie and North Platte rivers, is considered the first permanent settlement in Wyoming. The early 1800's in Platte County is primarily a history of immigrant passage. A few of the more hardy pioneers remained in the area and were chiefly engaged in furnishing supplies to the immigrants (Harmston and Lund, pp.13-15).

The first permanent cattle herd in the state is thought to have been that of W.A. Bullock and B.B. Mills who entered into business in 1868. The first cattle were shipped out of the state in 1870 and were owned by Hi Kelly who had a ranch located near the present town of Chugwater. The great cattle boom in this area took place primarily between 1870 and 1880. After 1883, the major cattle operations in the county were limited to the Swan Land and Cattle Company, a Scottish-owned company which began by purchasing the properties of Alexander Swan and Joseph Frank. This company at one time controlled over 1 million acres, its range stretching from Ogallala, Nebraska to Fort Steele, east of Rawlins, and from the North Platte River on the north to the Union Pacific Railroad on the south. The center of the operation, however, was always on Chugwater and Sybille creeks (Harmston and Lund, pp. 15-17).

The hard winter of 1886-87 marked the beginning of the decline of the big cattle era. Rangeland was being cut off from water by homesteaders making claims along the waterways. Soon dry-land farmers were fencing much of the open range.

The first irrigation projects were started in 1883, the beginning of the irrigated farming period which dominates the economy of Platte County today. The first large irrigation project in Platte County was started by the Wyoming Development Company on May 17, 1883. Immediately, however, the federal government brought a title suit, and progress was slowed until the passage of the Carey Act in 1894. The development of the irrigation system stands out as one of the major actions in Platte County's history. If it were not for the water

rights secured by the Wyoming Development Company and made permanent by the Carey Act, Platte County might well have a far different economy than it does today. Since the turn of the century, Platte County has been primarily a farming community, its economic and social trends being closely tied to the vicissitudes of the national agricultural market.

The town of Wheatland owes its existence to the Wheatland Colony, the name given to the irrigated farms developed by the Wyoming Development Company between 1883 and 1893. In 1894, the Globe Hotel and the Cheyenne & Northern railroad depot were erected in Wheatland. A flour mill and the town's first bank, under the name of Stewart and Company, Bankers, were opened in 1897. Wheatland was incorporated in 1905, and in 1911 became the county seat of Platte County (WHRSP, p. 18).

But Wheatland has not always been the major urban center in Platte County. In fact, one of the major historic trends in the county has been the growth and decline of a number of its towns. Towns which have "boomed" at various times include Chugwater, Slater, Uva, Dwyer, Hartville, Sunrise, Glendo, and Guernsey.

Guernsey, Hartville, and Sunrise owe their existence primarily to the discovery of copper and iron ore deposits around the turn of the century. Glendo and Dwyer were originally founded as the homes of dry-land farmers, a number of whom had migrated from Missouri. Chugwater and Slater were primarily cattle-raising centers before the establishment of the major irrigation projects. Chugwater was the home office for the Swan Land and Cattle Company until 1947.

Some sources credit Uva as being the oldest community in Platte County. Located at the junction of the Laramie and North Laramie rivers, Uva was originally on the land of the Duck Bar Ranch owned by the Teschmacher and de Billier cattle outfit which ran as many as 20,000 cows in the 1870's. In 1938, Uva boasted a general store, post office, and over 100 residents (Platte County Record, July, 1938).

From the advent of the Wheatland irrigation project in 1883 until 1930, Platte County was a thriving agricultural community. As late as 1925, a local Wyoming paper described Platte County in terms of glowing prosperity:

"One of Wyoming's Youngest Common Wealths, Powerfully Productive, Now in its Blossom-time, It (Platte County) is Rich in Natural Resources and With a Wealth of the Romance of the Old West Still Clinging, a New Era is Rapidly Placing It Among the Front Ranks of the Counties of the State" (The Midwest Review 6, no. 10 (October 1925):1).

But the bloom faded for Platte County during the 1930's. Like other agricultural communities, Platte County was hit hard by the Depression. The total number of farms was drastically reduced, and the population in the county declined from 9,695 in 1930 to 8,013 in 1940. Although the country recovered from the Depression, the county's downward trend in population and economic growth did not reverse until construction of the power plant in 1976. By 1950, the population was 7,925, by 1960 it was 7,195, and by 1970 the population was 6,486. This decline was reinforced during the '40's and '50's by two trends in agriculture: the movement toward larger farms and increased mechanization, both of which were attributable, in part, to the increasingly lower marginal rate of return for farm products.

2.2 Demographic Characteristics

Between 1930 and 1970, the population of Platte County declined by 33.1 percent. This long-term population decline was primarily the result of out-migration. Table 2-1 shows the population of Platte County and municipalities for 1960, 1970, and 1980. Between 1970 and 1980, the population of Platte County increased 184.6 percent. Sixty percent of this growth took place in the town of Wheatland. Wheatland's population increased by 232.8 percent during this same time period. Guernsey, Glendo, and Chugwater also experienced some increases in population, although the absolute numbers are quite small.

The growth experienced by Platte County can be mostly attributed to the construction of Missouri Basin's Laramie River Station, the coal fired electric generating plant located near Wheatland. Because of this, the concentration of population has centered on Wheatland. In 1960 only 32.7 percent of the county population resided in Wheatland, compared to 38.5 percent in 1970. By 1980, however, almost 50 percent (48.6 percent) of the county population resided within the town limits of Wheatland.

Table 2-2 and 2-3 show the age and sex distribution for Platte County in 1970 and 1980, respectively. As can be noted, there was a shift in the age and sex distribution for the county between 1970 and 1980. In 1970, 52.7 percent of the population was 34 years old or younger. By 1980, 61.8 percent of the population was 34 years old or younger. This increase in younger population was accompanied by a disproportionate increase in the number of males 25-34 years old. In

Table 2-1
Population of Platte County
and Incorporated Towns
1960, 1970, 1980

	1960 Census ¹	1970 Census ²	1980 Census ³
Platte County	7,195	6,486	11,975
Wheatland	2,350	2,498	5,816
Guernsey	800	793	1,152
Hartville	177	246	149
Glendo	292	210	367
Chugwater	287	187	282

¹U.S., Department of Commerce, Bureau of the Census, United States Census of Population: 1960, PC(1), Number of Inhabitants, pt. 52A, Wyoming.

²U.S., Department of Commerce, Bureau of the Census, 1970 Census of Population, PC(1), Number of Inhabitants, pt. 52A, Wyoming.

³U.S., Department of Commerce, Bureau of the Census, 1980 Data from Census Retrieval and Information Service, Institute for Policy Research, University of Wyoming, Laramie.

Table 2-2
Age and Sex Distribution
for Platte* County
1970

Age Group	Number of Males	Number of Females	Total	Percent of Total	Wyoming Percent of Total
0-14	944	884	1,828	28.2	29.8
15-24	373	428	801	12.3	17.3
25-34	386	402	788	12.2	12.1
35-44	306	272	578	8.9	11.5
45-54	360	442	802	12.4	11.2
55-64	419	380	799	12.3	9.0
65+over	<u>426</u>	<u>464</u>	<u>890</u>	<u>13.7</u>	<u>9.1</u>
TOTAL	3,214	3,272	6,486	100.0	100.0

* U.S., Department of Commerce, Bureau of the Census, 1970 Census of Population, PC(1), General Population Characteristics, pt. B52, Wyoming.

Table 2-3
Age and Sex Distribution
for Platte*County
1980[†]

Age Group	Number of Males	Number of Females	Total	Percent of Total	Wyoming Percent of Total
0-14	1,595	1,492	3,087	25.8	25.8
15-24	1,067	974	2,041	17.0	19.9
25-34	1,225	1,049	2,274	19.0	18.9
35-44	784	670	1,454	12.1	11.3
45-54	592	476	1,068	8.9	8.9
55-64	480	489	969	8.1	7.4
65+over	<u>488</u>	<u>594</u>	<u>1,082</u>	<u>9.0</u>	<u>7.9</u>
TOTAL	6,231	5,744	11,975	100.0	100.0

Median Age Platte County 1980 = 28.5

Median Age State of Wyoming 1980 = 27.1

* U.S., Department of Commerce, Bureau of the Census, 1980 Data from Census Retrieval and Information Service, Institute for Policy Research, University of Wyoming, Laramie.

1970, females outnumbered males in this category by 4.1 percent. (This phenomenon was caused by the out-migration of young males.) By 1980, this trend had reversed and males outnumbered females in this age category by 16.8 percent. The increase in males in this age category (25-34) was related to the need for labor on the Laramie River Station Power Plant. This relative increase in the number and proportion of young people in Platte County led to the relative decrease in the proportion of people 65 years old and older.

Platte County covers 2,033 square miles. This resulted in a population density in 1970 of 3.2 people per square mile. With the construction of the Laramie River Station, the population density of the county increased. By 1980, after peak construction, the population density of the county was 5.9 people per square mile. The increase in population density is somewhat misleading, however, since much of the new population growth was centered in Wheatland and did not reach the far edges of the county. The net impact of this increased population density was to convert some agricultural land to residential use in or near the town of Wheatland. Outlying agricultural areas of the county were largely unaffected directly by increased population density in and around Wheatland. (The indirect effects will be discussed in a later chapter.)

Chapter III

Chronology

3.1 Introduction

Wheatland, Wyoming, located in Platte County, is the home of a new 1,500 megawatt coal-fired, water-cooled, steam-generating, electric power plant. Wheatland was selected as a study community for the Social Effects Project because it has experienced tremendous energy-related population growth and is now in the process of losing much of that population.

The cycle of build-up and decline is often referred to as the "boom-and-bust cycle". Many communities in the western United States have gone through this boom and bust cycle, some more than once. The cycle has often been associated with mineral extraction. Gold, silver, coal, trona, uranium, oil, and gas extraction mark the birth, growth, and death of many western communities. Wheatland, Wyoming is unique in the respect that it has no extractive mineral industry to speak of yet represents a unique addition to the old "boom-and-bust cycle".

Construction of plants that convert one form of potential energy to another form has been increasing in the West. These plants impact communities much the way other types of energy development do (in the initial stages of development). Rapid population growth and the need for the community to accommodate new growth characterize the initial problems. In this adaptive process, the way of life, the political structure, the looks of the community, the small town atmosphere, the

local services, the service delivery systems all change to some extent.

3.2 Traditional Economic Base

Prior to development of the Laramie River Station Power Plant, the economic base of Platte County was firmly entrenched in agriculture. Other than agriculture, there had been some mining and railroad activity in the county. Table 3-1 shows employment by industry in Platte County for 1960 and 1970. Agriculture, forestry, and fisheries accounted for the largest single employment sector in the county. The percent of total employment in the agricultural sector decreased from 28.7 percent in 1960 to 23.9 percent in 1970.

This decrease in the relative importance of agriculture occurred at a time when the actual number of jobs in the county remained the same. The decrease in the number of agricultural jobs was accompanied by a decrease in the number of mining and railroad jobs between 1960 and 1970. These decreases were off-set by increases in employment in the category of "lumber, wood products, and furniture" as well as the category of "electrical and other machinery manufacturing". Increases in employment were also seen in various services industries.

Table 3-2 shows employment in Platte County by occupation for 1970. The single largest occupational category is "farmers, farm managers, and farm laborers". This occupational category accounts for 22.4 percent of the total work force. The other main categories of occupations are service workers (with 12.1 percent of the total work

Table 3-1
Employment by Industry in Platte County
1960, 1970*

Industry Sector	1960 Census ¹	Percent of 1960 Total	1970 Census	Percent of 1970 Total
Agriculture, forestry, & fisheries	743	28.7	618	23.9
Mining	228	8.8	198	7.7
Contract Construction	243	9.4	203	7.8
Food and kindred products mfg.	18	0.7	8	0.3
Lumber, wood products, furniture	0	0.0	34	1.3
Printing & publishing mfg.	12	0.5	18	0.7
Electrical & other machinery mfg.	0	0.0	18	0.7
Miscellaneous mfg.	0	0.0	42	1.6
Railroads & railway express	99	3.8	61	2.4
Trucking & warehousing	28	1.1	23	0.9
Other transportation	23	0.9	23	0.9
Communications	8	0.3	30	1.2
Utilities & sanitary service	55	2.1	66	2.6
Wholesale trade	26	1.0	30	1.2
Food & dairy product stores	51	2.0	83	3.2
Eating & drinking places	152	5.9	152	5.9
Other retail trade	235	9.1	318	12.3
Finance, insurance, & real estate	54	2.1	29	1.1
Hotels & personal services	60	2.3	72	2.8
Entertainment, recreation services	0	0.0	21	0.8
Private households	42	1.6	28	1.1
Business & repair services	31	1.2	41	1.6
Professional services	280	10.8	303	11.7
Public administration	158	6.1	167	6.5
Others (not reported)	40	1.5	0	0.0
TOTAL	2,568	100.0	2,568	100.0

* The "Socioeconomic Impact of the Proposed Laramie River Station" by the Division of Business and Economic Research, University of Wyoming, August 1975.

¹ U.S. Department of Commerce, Bureau of the Census, United States Census of Population: 1960, PC(1), General Social and Economic Characteristics, pt. 52D, Wyoming.

² U.S. Department of Commerce, Bureau of the Census, 1970 Census of Population, PC(1), General Social and Economic Characteristics, pt. C52, Wyoming.

Table 3-2

Employment by Occupation in Platte County

1970*

Occupation	Number Employed	Percent of Total Force
Professional, technical, and kindred occupations	112	4.3
Teachers	119	4.5
Non-farm managers and administrators	143	5.5
Sales workers	115	4.4
Clerical and kindred occupations	297	11.3
Craftsmen		
mechanics	33	1.3
repairmen	34	1.3
metal craftsmen	18	0.7
carpenters	37	1.4
construction		
craftsmen	89	3.4
others	158	6.0
Operatives	225	8.6
Transport and truck drivers	110	4.2
Laborers		
construction	26	1.0
freight	40	1.5
others	36	1.4
Farmers, farm managers, and farm laborers	591	22.4
Service workers	317	12.1
Private households	19	0.7
Others (not reported)	104	4.0
TOTAL	2,623	100.0

* U.S. Department of Commerce, Bureau of the Census, 1970 Census of Population, PC(1), General Social and Economic Characteristics, pt. C52, Wyoming and "The Socioeconomic Impact of the Proposed Laramie River Station" by the Division of Business and Economic Research, University of Wyoming, August 1975.

force) and clerical workers (with 11.3 percent of the total work force).

It should be emphasized that agriculture in Platte County is following a national trend. Specifically, fewer and fewer people are producing more agricultural products. This trend is less apparent in the western United States but present nonetheless. By 1970 the number of jobs in agriculture in Platte County had declined 4.8 percent.

3.3 Exogenous Change

Energy development came to Wheatland in 1976 with the construction of a 1500 megawatt coal-fired electric generating power plant. The Missouri Basin Power Project consists of three 500 megawatt generating units located approximately five miles north of Wheatland.

Construction on the facility began in late 1976 and is scheduled for completion by early 1983. In addition to the power plant, Missouri Basin Power Project built the Grayrocks Dam on the Laramie River and transmission lines to link into the power grid.

As with any type of development that causes in-migration, the first concern is with the number of in-migrants. Table 3-3 indicates the projected size of the construction work force versus the actual number of construction employees.

There are at least four variables that relate directly to construction employment at the power plant. They are:

Table 3-3: Actual Versus Projected Average
Construction Work Force Levels for MBPP

<u>Period</u>	<u>Original Projections *</u>	<u>Revised *</u> <u>Projections</u>	<u>Actual Number</u>
1976	115	0	187
1977	522	0	548
1978	1,175	0	1,867
1979	1,974	0	2,344
1980	1,521	0	2,203
1981	1,115	0	2,161
1980 (1st quarter)	1,521	0	1,882
1980 (2nd quarter)	632	0	2,161
1980 (3rd quarter)	331	1,698	1,882
1980 (4th quarter)	0	1,340	1,403
1981 (1st quarter)	0	1,037	1,163
1981 (2nd quarter)	0	950	1,044
1981 (3rd quarter)	0	838	1,009
1982	0	164	

Source: Socioeconomic Impact Monitoring Report #47, 3rd quarter.
1981, Missouri Basin Power Project Socioeconomic Impact
Monitoring Program.

* Burns and McDonnell, June, 1975.

** MBPP, June, 1980 and August, 1981.

1. construction worker profile (marital status, number of children, probability of bringing family to construction area),
2. community patterns (proportion of work force likely to commute, range of commuting distance, proportion of daily and weekly commuters),
3. induced employment (the number of other jobs that increased population will cause in the service industries), and
4. induced population.

Each of these variables must be studied and estimated carefully to project the overall impact of a particular energy project. Table 3-4 shows the projected construction employment, the expected construction population (workers and families, the expected distribution of community workers, the induced employment, and the induced population. (Table 3-4 is based on different projections from Table 3-3.) As indicated by Table 3-4, the peak construction work force was expected to be 2,000 in 1979. From that peak the project will taper off to 560 employees in 1983, the last projected construction year. The peak employment in 1979 was expected to produce a total construction population of 3,440 and a total induced population of 1,960. The total population effect of the power plant in the peak construction year was projected to be 5,710 in 1979 and 1,000 by the time the plant was operational.

Table 3-5 indicates the expected increases in Wheatland's population. The total population increase caused by the power plant was not expected to be totally absorbed by Wheatland. Table 3-6

Table 3-4: Projected Population and Employment Increases Associated With Plant Construction and Operation

Description	Peak During Year									
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Construction Employment ²	520	750	1,780	2,000	1,210	630	840	560	0	0
daily commuters	100	150	360	400	250	130	160	120	0	0
weekly commuters	210	300	710	800	480	250	340	220	0	0
temporary residents	210	300	710	800	480	250	340	220	0	0
Construction Population	900	1,290	3,060	3,440	2,070	1,070	1,440	960	0	0
Plant Employment ²	Neg. ³	Neg.	30	120	160	160	160	200	200	200
Plant Population	Neg.	Neg.	70	310	400	400	400	520	520	520
Induced Employment	110	220	500	750	730	590	570	530	390	360
Induced Population	290	560	1,310	1,960	1,890	1,540	1,480	1,370	1,000	940
TOTAL POPULATION INCREASE	1,190	1,850	4,440	5,710	4,360	3,010	3,320	2,850	1,520	1,460

Source: The Socioeconomic Impact of the Proposed Laramie River Station, Division of Business and Economic Research, University of Wyoming, August, 1975.

¹ Division of Business and Economic Research estimates.

² Based on Burns and McDonnell (Kansas City, Missouri) projection for construction and permanent employment.

³ Negligible.

Table 3-5: Projected Population of Wheatland, Wyoming
1976-1985

Description	1976	1977	1978	Peak During Year					1983	1984	1985
				1979	1980	1981	1982	1983			
Resident Population	2,960	3,020	3,080	3,140	3,200	3,270	3,330	3,400	3,470	3,540	
Construction Population	760	1,100	2,600	2,940	1,760	910	1,220	820	0	0	
Plant Population	Neg. ²	Neg.	60	270	340	340	340	440	440	440	
Induced Population	250	480	1,110	1,670	1,610	1,310	1,260	1,170	860	800	
TOTAL POPULATION	3,970	4,600	6,850	8,020	6,910	5,830	6,150	5,830	4,770	4,780	

Source: The Socioeconomic Impact of the Proposed Laramie River Station, Division of Business and Economic Research, University of Wyoming, August, 1975.

¹Division of Business and Economic Research estimates.

²Negligible.

Table 3-6: Breakdown of MBPP Construction Work Force
by Type of Workers

<u>Period</u>	<u>Percent Daily Commuters</u>	<u>Percent Weekly Commuters</u>	<u>Percent Temporary Residents</u>	<u>Total</u>
1978	28%	45%	27%	100%
1979	26%	43%	31%	100%
1980 (1st Quarter)	26%	43%	31%	100%
1980 (2nd Quarter)	26%	43%	31%	100%
1980 (3rd Quarter)	25%	42%	33%	100%
1980 (4th Quarter)	24%	41%	35%	100%
1981 (1st Quarter)	24%	41%	35%	100%
1981 (2nd Quarter)	28%	38%	34%	100%
1981 (3rd Quarter)	31%	38%	31%	100%

Source: Socioeconomic Impact Monitoring Report #47, 3rd Quarter, 1981, Missouri Basin Power Project Socioeconomic Impact Monitoring Program.

indicates the reason for this was that much of the work force actually commuted either on a daily or weekly basis. In the peak year, for instance, 26 percent of the construction workers commuted daily, 43 percent commuted weekly, and only 31 percent were Wheatland residents (temporary residents). At present, 31 percent of the construction work force commute daily, 38 percent commute weekly, and 31 percent live in town. The large percentage of commuters has helped alleviate some of the potential impacts to Wheatland.

One very important consideration for analyzing impact is the nearness of population centers to the energy project. Table 3-7 shows the distances commuted by construction employees. For 1981, 60 percent of the commuters, on the average, commuted 71-90 miles oneway to reach the power plant. It is apparent that the vast distances between communities in the western United States demand longer commuting distances. What is interesting is that workers are willing to drive 142-180 miles per day to travel to and from work.

Missouri Basin is considered by many area respondents as a good company to work with. Specifically, they meant that Missouri Basin took necessary steps early in the development process to alleviate or mitigate potential negative impact. The formation of the Platte County Impact Alleviation Task Force is a good example of MBPP and the community working together to plan for impact. Whereby the planning process was a good idea, the actual composition of the task force probably had the greatest effect on its actual success. An industrial planning committee actually predated the task force and was made up of

Table 3-7: Distance Traveled by MBPP Construction
Work Force - Daily Commuters

Miles Driven (one way)	3rd Quarter 1981	2nd Quarter 1981	3rd Quarter 1980
0-10	16%	20%	18%
11-30	5%	5%	4%
31-50	1%	1%	1%
51-70	8%	10%	17%
71-90	65%	60%	55%
91-110	4%	4%	4%
Over 110	1%	0%	1%

Source: MBPP Monitoring Staff.

local influentials. This group evolved into the core of the Task Force.

Two of the main problems identified early in the planning process were housing and schools. MBPP built Black Mountain Village, a planned unit development (PUD), on the edge of Wheatland to help alleviate the housing problem. Black Mountain Village provided bachelor quarters, a mess hall, recreational vehicle pads, bath houses, mobile home spaces, and a recreation center for in-migrants. The eventual plan was to convert every two mobile home spaces to a residential housing lot. (Some of this has taken place, but MBPP has asked to have the remaining lots rezoned for mobile home lots.) MBPP also made money available in the early stages of development for capital facilities expenditures by the school district so construction could begin on a new school before bonds were sold.

The construction phase of the power project is relatively short-lived compared to the useful life of the power plant. Thus, one needs to look not only at the short term problems of having a large influx of people into the community but also at the effects of having much of that increased population leave with only the permanent work force remaining behind. It is estimated that once the plant becomes fully operational, 284 permanent employees will be needed. Table 3-8 represents the projected and actual permanent work force figures from 1978 to 1983. Using a permanent work force total of 200 as indicated in Table 3-4 would produce a total increase in population of approximately 1,460. Using the same ratio of permanent employees to induced population, one could expect a total increase in population of

Table 3-8: Actual Versus Projected MBPP Permanent Work Force

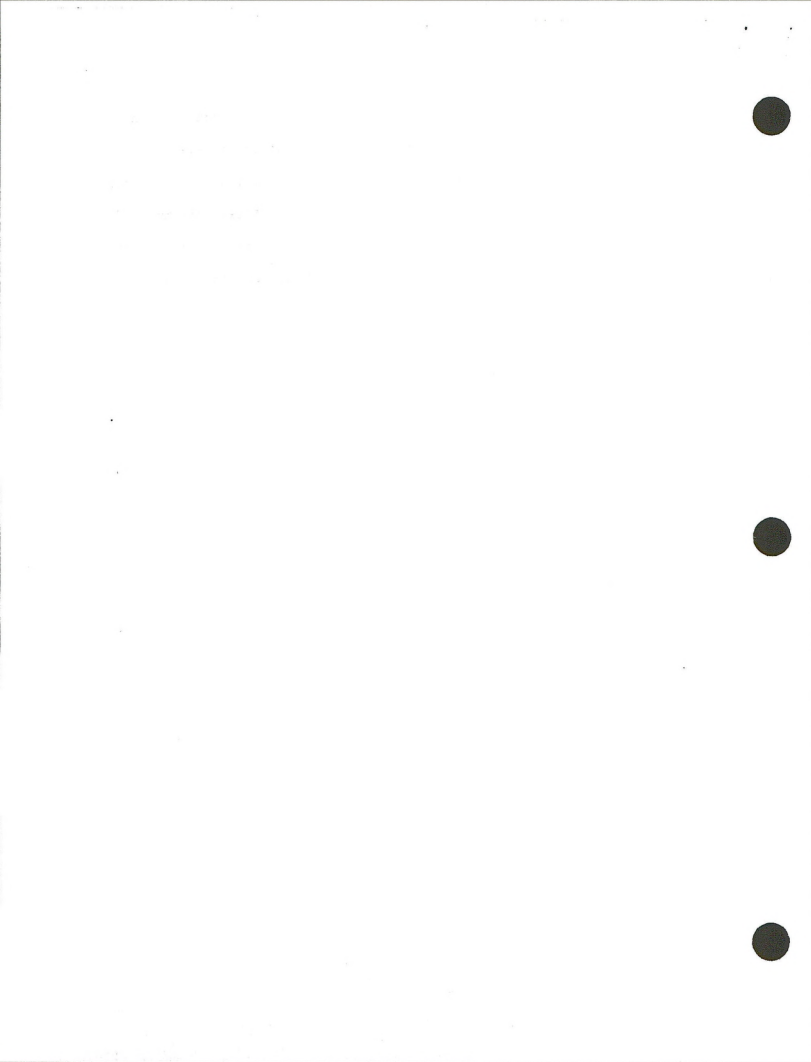
<u>Period</u>	<u>Original *</u> <u>Projections</u>	<u>Revised **</u> <u>Projections</u>	<u>Actual</u> <u>Number</u>
12-31-78	30	50	54
12-31-79	120	210	206
3-31-80	130	210	223
6-30-80	160	210	240
9-30-80	160	210	261
12-31-80	160	210	269
3-31-81	160	220	279
6-30-81	160	220	294
9-30-81	160	220	296
12-31-81	160	220	
12-31-82	160	284	
12-31-82	200	284	

Source: Socioeconomic Impact Monitoring Report #47, 3rd Quarter, 1981, Missouri Basin Power Project Socioeconomic Impact Monitoring Program.

* Burns and McDonnell, June, 1975.

** Burns and McDonnell, November, 1978.

2,073 for the operating phase of the plant. This total increase in population will be above the pre-impact population of the area. Once the plant becomes fully operational, the total population of Wheatland will decline as the construction workers, their families, the induced service employees, and their families leave. Table 3-5 indicates the projected population of Wheatland from 1976 to 1985. The population was projected to peak in 1979 and then decline until the complete operational phase is reached in 1984. It is interesting to note that the projections made by the University of Wyoming for Wheatland, Wyoming called for a 1981 population of 5,830. A note on the bulletin board in the building inspector's office in Wheatland's City Hall listed the population of Wheatland as of March, 1981 as 5,816.



Chapter IV

Differentiation

4.1 Introduction

In the following chapters the four main sociological processes of differentiation, stratification, integration, and extra-local linkages are analyzed in reference to social change in Wheatland, Wyoming. Data was collected on these processes using personal interviews and a snowball sampling technique. Interviews varied from approximately one hour to three hours.

4.2 Differentiation (Diversity/Complexity)

Differentiation is a measure of the complexity of a given system. In social systems (communities, for instance) differentiation refers to the diversity of positions and/or groups in the community. Generally as development takes place, communities become increasingly differentiated. Specifically, new groups with new roles are created to meet new needs and demands. The increased diversity of people moving into a community can be responsible for stimulating differentiation. The needs brought on by larger and denser populations can also stimulate such differentiation. Technological innovations and increasingly sophisticated technological systems can increase the need for structural differentiation. Although not well documented, it is possible that expectations of change in respect to population can stimulate differentiation in communities.

In Wheatland increased differentiation started taking place in the planning stage of the Laramie River Station Power Plant. Thus a relatively stable, if not declining, community started experiencing differentiation with the expectation of development. The planning stage and the resulting differentiation could have been important in terms of helping Wheatland and Platte County deal with rapid development. Differentiation will be discussed in three categories: political, economic, and social.

4.3 Political Differentiation

The first evidence of political differentiation related to energy development was the emergence of the Platte County Impact Alleviation Task Force from what was originally the Industrial Planning Committee. The task force was organized in August of 1974 to "begin to collect information, conduct studies, establish needs, and develop guidelines for an orderly growth and development". The task force had no legal authority to control or change development. It acted as an information center and a liaison between the community and Missouri Basin Power Project (MBPP). Information and data related to the plant was released through the task force. The task force formed several committees to look into particular expected or existing problem areas. These committees were:

Human Services Committee

Housing and Finance Committee

Community Integration Committee

Economic Development Committee

Tourism and Recreation Committee

The accomplishments of the task force are difficult to separate from the adaptive changes that took place in the community from 1974 to the present. Since members of the task force represented many of the local agencies, change in a particular agency or change brought on by a particular agency head could be related back to the work of the task force. The task force particularly looked at problems for the young and the aged associated with development. Examples of change, adaptation, and increased differentiation in Platte County listed in the task force Chronology include the following:

- (1) housing authority established by the Platte County Commissioners
- (2) senior citizen housing built
- (3) city-county airport authority established (1974)
- (4) planner hired by the Platte County Planning Commissioner (1975)
- (5) day care corporation formed and officers elected (1975)
- (6) social services sub-committee formed incorporating mental health, senior citizens, D-PASS, and the ministerial association
- (7) human services team placed in Wheatland from the University of Wyoming and advisory board formed
- (8) monitoring board formed to monitor impact of MBPP (1976)
- (9) new elementary school built (1977)
- (10) promotion committee of the task force formed to promote Platte County

- (11) economic development committee for future industrial development in Wheatland breaks away from the Task Force and associates with the Chamber of Commerce.

Many people in Wheatland indicate that the town is an excellent example of how to handle energy development, and the task force was instrumental in planning for change. Overall there are two major things people point to in Wheatland when asked to explain why they thought the town and county came through the development so well. The reasons are: (1) Missouri Basin was a good company to work with, and (2) the task force helped the town plan adequately and adapt before the population impact was felt.

It should be pointed out, however, that there was some local criticism of the task force, both at the early stages and the later stages of the development of MBPP. This criticism centers around the relationship between MBPP and the task force. Specifically some community residents felt that the task force was being manipulated by MBPP for a corporate advantage. Some criticism hinted that individual task force members could possibly benefit financially by making decisions beneficial to MBPP. On several occasions, the task force took action to indicate its disapproval of possible delays in construction of the MBPP. The task force's position in its various actions was most probably related to the negative effects of inconsistent or unstable labor conditions likely to arise with delays or work stoppages.

Two other organizations were specifically formed in reaction to the MBPP. These were the Laramie River Conservation Council (LRCC)

and the Goshen-Platte Protection Association (GPPA). The LRCC was originally formed because of the issues involved with the acquisition and transfer of water for MBPP. The group is made up primarily of people involved in agriculture and concerned with the long-term effects on a limited resource in the region. Once formed, however, the LRCC became the chief adversary to MBPP, forcing Missouri Basin to justify its projections, engineering designs, estimates, etc.

The emergence of such groups, often referred to as "constituency formation", is important in that dissenting voices can be united and heard. It is difficult to measure the success of the LRCC, although some feel that the real role of the LRCC was to "keep MBPP honest".

The GPPA was an organization similar to the LRCC. The focus of the GPPA was the power transmission lines connecting the MBPP to the power grid in Nebraska. The GPPA was not as formidable an adversary as LRCC.

The creation of the task force, authorities, committees, the Laramie River Conservation Council, and the Goshen-Platte Protection Association represents increased differentiation in response to energy development. It is important, however, to note that existing agencies also increased differentiation prior to development of the MBPP. Table 4-1 shows sheriff's department personnel for Platte County in 1975 (pre-development) and 1981. As can be noted, the sheriff's department has changed from two officers to eight officers since 1975. In 1975 the sheriff and undersheriff had to drive their own cars on patrol. Also in 1975, the sheriff and his wife lived in the courthouse and ran the county jail without reimbursement. At present,

Table 4-1

Sheriff's Department Personnel 1975, 1981

	1975	1981
Full-Time Sheriff	1	1
Full-Time Under-Sheriff	1	1
Deputies	0	6

Source: "The Socioeconomic Impact of the Proposed Laramie River Station", the Division of Business and Economic Research, University of Wyoming, August, 1975 and personal interview with Einer Michelson, Sheriff, Platte County, Wyoming.

cars are furnished by the county, and the county has recently appropriated funds to hire a jailer to run the county jail. Not represented in the table is the fact that, at one point, the sheriff's department hired ten additional officers to handle security at the MBPP. The sheriff's department no longer supplies security to the plant site. (The sheriff did view the contract with MBPP for plant security in positive terms for the sheriff's department.)

Table 4-2 indicates changes in the town of Wheatland's police department. In 1975, the police department was comprised of five full-time officers including the chief. At present there are fourteen officers. Both the police chief and the sheriff feel that they were careful not to expand their forces beyond the capacity of their respective political entities to support them in the long run. Therefore, both feel there will be no need for reduction of their forces as the construction on the MBPP is phased out.

The increased number of personnel and the changing social situation brought on different operating practices in the police department. There was some movement toward the formalization of procedures, especially those related to safety. This was deemed necessary as experience showed a more violent reaction to policing efforts. Such procedures as always answering domestic disturbance calls with two officers became routine. The police department also assisted the sheriff's department in dealing with problems such as strikes and picket lines at the MBPP.

The police department, although moving toward increased formalization of procedures, was able to maintain some of that

Table 4-2

Town of Wheatland Police Department Personnel 1975, 1981

	1975	1981
Police Chief	1	1
Assistant Police Chief	1	1
Full-Time Patrolmen	3	12
Clerical	-	1
Animal Shelter Custodian	-	1

Source: "The Socioeconomic Impact of the Proposed Laramie River Station" Division of Business and Economic Research, University of Wyoming, August, 1975 and personal interview with Buck Evans, Police Chief, Wheatland, Wyoming.

informal approach to law enforcement that differentiates urban areas from small towns. Thus, the police force was able to stay on good terms with both the long time residents and the newcomers.

Other examples of increased differentiation through an increased number of positions are the Department of Public Assistance and Social Services, the Southeast Wyoming Mental Health Center, and the Parks and Recreation Department in Wheatland. The Department of Public Assistance and Social Services (D-PASS) had caseload increases resulting from multiple problems of the larger population served. Although the population of Platte County almost doubled between 1970 and 1980, demand for most services did not increase proportionately. Table 4-3 shows the percentage increase in caseloads for selected D-PASS services from 1975 to 1981. As can be noted, public assistance increased 149 percent, social services 149 percent, foster care 106 percent, family counseling 425 percent, and transient services 180 percent. Of these increased caseloads only family counseling caseloads increased faster than the population. This increased caseload of 425 percent is consistent with the police chief's indication of increased family violence with development. (The police chief estimated that of the increased family violence calls, 60 percent were related to newcomers and 40 percent to long-term residents.)

Table 4-4 indicates the caseloads for selected D-PASS services and the percent of the county population on assistance from 1975 to 1981. It is interesting to note that the percentage of the county population receiving some type of public assistance has been generally declining since 1975. The Platte County director for D-PASS has

Table 4-3

Percentage Increases in Caseloads
for Selected D-PASS Services 1975 to 1981*

Selected Services	% Increase 1975-1981
Public Assistance	149%
Social Services	149%
Foster Care (including child protection)	106%
Family Counseling	425%
Transient Services	180%

* Source: Report by Jill Holloway, Director, Department of Department of Public Assistance and Social Services, Platte County.

Table 4-4

Caseloads for Selected Services of
Department of Public Assistance and Social Services, Platte County, FY75 to FY81*

Fiscal Year	LSC	AFDC	Foster	SSI	EA	Food Stamps	NMP	Estimated Population	Percent on Assistance
	Monthly Average			Monthly Average					
1975	21	369	88	93	21	2,561	932	7,275	3.2%
1976	24	406	172	78	21	2,327	993	8,340	2.8%
1977	24	471	68	62	34	2,652	976	9,500	2.3%
1978	24	542	72	61	30	2,424	816	11,000	1.9%
1979	24	497	67	52	46	2,736	957	12,000	1.8%
1980	24	657	45	51	45	4,009	950	11,584	2.1%
1981	25	677	52	45	40	4,247 (11 months)	958	11,584	1.0%

LSC = Licensed Sheltered Care

AFDC = Aid to Families with Dependent Children

Foster = Foster Care Program

SSI = Supplemental Security Income

EA = Energy Assistance

NMP = Minimum Medical Program

* Source: Report by Jill Holloway, Director, Department of Public Assistance and Social Services, Platte County.

stated that the vitalized economy brought on by MBPP has, overall, helped D-PASS clients. It is too early, however, to tell what the long-term effects of the MBPP will be on D-PASS clients since the construction labor force is just starting to taper off. Aid for Families with Dependent Children experienced only a slight decrease during the boom and has increased with decline of the construction work force at the MBPP. Table 4-5 indicates the percentage of the county population receiving AFDC. As can be noted, a larger percentage of the population was receiving AFDC payments in 1980 than any other year. The director of D-PASS offers the following three alternative explanations for this phenomenon: "Wyoming's lack of step-parent responsibility for step children; lay-offs in other parts of the country with the resulting migration to Wyoming; and the general state-wide increase in AFDC caseloads".

While caseloads increased at the local D-PASS office, staff positions increased only slightly. Specifically the staff size went from five positions in 1970 to seven positions at present. (There was one additional service worker from 1976-1978.) Part of the reason that the number of agency positions did not increase more drastically was the expansion and increased coordination with related agencies in the area. D-PASS uses the following agencies regularly:

- ESC (Employment Security Commission)
- DVR (Division of Vocational Rehabilitation)
- Probation and Parole
- Public Health Unit
- Mental Health Center
- County Attorney
- Law Enforcement (city and county)
- Child Protection Team
- Adult Protection Team
- Family Planning
- Social Security

Table 4-5

Percent of Platte County Population
Receiving Aid to Families with Dependent Children, FY75 to FY80*

Fiscal Year	Percentage of County Population
1975	5.0%
1976	4.8%
1977	4.9%
1978	4.9%
1979	4.1%
1980	5.6%

* Source: Report by Jill Holloway, Director, Department of Public Assistance and Social Services, Platte County.

Increasingly people coming into D-PASS have had multiple problems that have necessitated more and better inter--as well as intra--agency coordination.

The Recreation and Parks Department was originally funded through donations and operated at the county level immediately prior to the development of the MBPP. The department is currently funded at the school district level with a 2.5 mill levy. The current director of the Parks and Recreation Department has been in the position since 1976. The director feels that the recreational needs of the community were ignored in the early planning stages of the MBPP. MBPP dealt with recreational needs privately by building the Black Mountain Village Recreation Center, but this center did not take care of public needs. Originally some area residents had the impression that the Black Mountain Village Recreation Center would be for general public use and that it would be turned over to the community when construction at the MBPP was completed. There are some hard feelings in the community because the recreation center was restricted to MBPP personnel and families only. Thus, the Parks and Recreation District has begun construction on a \$600,000 public swimming pool complex in the city's park. (Just recently the MBPP has opened the recreation center to general public use at a nominal fee.) Some residents maintain that MBPP and the city or county should have coordinated their efforts to produce one larger public recreational complex to serve both public and private needs. However, such an approach may not have been fast enough to service the MBPP construction work force

when construction began. Although two separate recreational facilities have emerged (or one is in the process of emerging), one private and one public, the Parks and Recreation Department was instrumental in coordinating the softball program in which many of the long-term residents and construction workers participated. In a show of community support, individual subcontractors to the MBPP donated time and equipment to build new softball fields to accommodate the increased population growth.

4.4 Economic Differentiation

The construction of the Missouri Basin Power Plant represents the most noticeable aspect of economic differentiation within Platte County. Although the construction work force was highly differentiated in terms of skills and jobs, their effect on the community was fairly short-term. The operating work force represents the greatest long-term affect on the community. Approximately 300 permanent positions have been created at the MBPP. Not only does the plant increase the economic diversity of the county, but it contributes considerably in terms of increased payrolls and increased tax base. Table 4-6 shows the actual permanent work force numbers by quarter from 1978.

Although original operating personnel projections were somewhat low, Table 4-7 shows the distribution, type, and numbers of employees that are expected to be needed to operate the power plant. Undoubtedly, many of these positions could not be filled locally, thus necessitating in-migration.

Table 4-6

Actual Number of Permanent
Work Force Employees at MBPP 1978-1981*

Year	Actual Number of Employees
12-31-78	54
12-31-79	206
3-31-80	223
6-30-80	240
9-30-80	261
12-31-80	269
3-31-81	279
6-30-81	294
9-30-81	296

* Source: "Socioeconomic Impact Monitoring Report #47, 3rd Quarter, 1981", Missouri Basin Power Project, Socioeconomic Impact Monitoring Program.

Table 4-7

Personnel Requirements for Plant Operation *

Position	Total Personnel		
	First Unit	First and Second Units	All Three Units
<u>Administrative</u>			
Plant Superintendent	1	1	1
Asst. Plant Superintendent	0	1	1
Results Engineer	1	1	1
Operating Supervisor	1	1	1
Shift Supervisors	4	5	5
Maintenance & Instrumentation Supv.	1	1	1
Plant Engineer	1	1	1
Office Supervisor	1	1	1
Warehousemen	2	3	3
Receptionist	1	1	1
Secretary	1	2	2
Custodian	1	1	1
<u>Operations</u>			
Control Room Operators	4	8	12
Asst. Control Room Operators	4	4	8
Equipment Attendants	4	8	12
Boiler Attendants	4	8	12
Water & Coal Testers	4	4	4
Coal Yard Operators	4	8	12
Yard Operators	3	4	4
Coalmen (bulldozers)	3	5	5
Labor	4	7	10
Relief Operators	2	3	5

Table 4-7 (continued)

Position	Total Personnel		
	First Unit	First and Second Units	All Three Units
<u>Maintenance</u>			
Welder	1	2	3
Machinist	1	1	1
Lead Mechanic	1	1	1
Mechanic I	5	9	10
Mechanic's Helper	2	4	6
Lead Electrician	0	1	1
Electrician I	1	1	2
Electrician II	2	3	3
Lead Instrument	0	1	3
Instrument I	1	1	1
Instrument II	2	2	2
Apprentice Instrument	1	1	1
Lead Painter, Insulator & Metalsmith	0	1	1
Painter, Insulator & Metalsmith	<u>2</u>	<u>3</u>	<u>4</u>
Subtotals	71	110	145
<u>Scrubbers</u>			
Operation	5	10	15
Maintenance	<u>25</u>	<u>35</u>	<u>40</u>
Grand Totals	101	155	200

* Date supplied by Burns & McDonnell, Kansas City, Missouri.

Source: "The Socioeconomic Impact of the Proposed Laramie River Station", Division of Business and Economic Research, University of Wyoming, August, 1975.

Presumably because of the temporary nature of the construction work force, economic differentiation in the service sector of the economy was held to a minimum. What new businesses did start in response to the boom have had trouble because of the declining construction work force and the general down-turn in the economy. The most often quoted example of this is "The Mall", a group of shops put into a remodeled auto dealership/garage. Several shops that were located in The Mall have either moved or gone out of business. Some of the shops are now simply vacant and one is used for a local union hall.

One restaurant/bar built in response to the boom is located outside of Wheatland near the turnoff to the MBPP. Once a meeting place for construction workers, the restaurant/bar seems to be suffering from the construction phase down. Evidence of the decreased business is the restriction of lunch service and luncheon menu.

Other examples of economic differentiation can be found in the expansion of a construction company into building materials and supplies. In this example the company filed for bankruptcy and the company property was put up at public auction. In cases such as this it is difficult to separate out the effects of the phase down of MBPP construction, the general economic down-turn nationally, and poor local management.

Overall, it seems that business in Wheatland did not, for the most part, expand or overbuild to meet increased population demands. In talking with local merchants, it appeared that sales were slow - a fact attributable as much to the national economic slow-down as to the

MBPP construction slow-down. Area merchants are optimistic that the Economic Development Committee of the Chamber of Commerce can attract other basic industry to the community. For the most part, it appeared area businessmen were aware that the population influx was only temporary and did not overbuild in response to the population increases. Another factor that limited economic differentiation was the fact that many of the construction work force were either daily or weekly commuters. Table 4-8 shows that approximately 25 percent of the construction work force commuted daily to Wheatland, 40 percent commuted weekly, and only 30 to 35 percent were residents of Platte County. The large number of commuters reduced the need for increased economic differentiation in Wheatland.

4.5 Social Differentiation

Social differentiation refers to the process by which social systems become more complex. This process creates new roles and groups as a response to changing conditions in or around the social system. Although social differentiation, in the broadest sense, includes political and economic differentiation, in this section the term will be used only in reference to the purely social aspects of life.

In Wheatland, evidence of increased social differentiation comes from several areas. Probably the most notable example is the increased division of existing churches in Wheatland. Local residents indicate that the division of existing churches into different congregations was brought on more by disagreements within the

Table 4-8

Breakdown of MBPP Construction Work Force by Type of Workers

Period	Percent Daily Commuters	Percent Weekly Commuters	Percent Temporary Residents	Total
1978	28%	45%	27%	100%
1979	26%	43%	31%	100%
1980 (1st Quarter)	26%	43%	31%	100%
1980 (2nd Quarter)	26%	43%	31%	100%
1980 (3rd Quarter)	25%	42%	33%	100%
1980 (4th Quarter)	24%	41%	35%	100%
1981 (1st Quarter)	24%	41%	35%	100%
1981 (2nd Quarter)	28%	38%	34%	100%
1981 (3rd Quarter)	31%	38%	31%	100%

Source: "Socioeconomic Impact Monitoring Report #47, 3rd Quarter, 1981", Missouri Basin Power Project Socioeconomic Impact Monitoring Program.

congregations (long-term residents) than by diverging ideas of newcomers. It is possible, however, that the increased population made economic support of splinter congregations more feasible.

Another often-mentioned example of increased social differentiation is the Platte County Players, a group of local residents who produce and act in local community plays. Apparently the community enjoys the group, and thus the group is often mentioned as a benefit of development. Newcomers, as well as long-term residents, are represented among the Platte County Players.

Diverse needs and wants, as well as talents and skills, were brought in by newcomers in the community. Thus, one of the local stores (basically a picture frame/novelty shop) gradually started accommodating hobby needs. Eventually these new needs and wants were met through hobby classes taught by this local store. Interestingly, the instructors for these hobby classes were newcomers, for the most part, though both newcomers and long-term residents participated in the hobby classes. With the slow down in construction at MBPP, it is questionable whether these classes will continue. The hobby shop has noticed a drop in business, but, again, separating the effects of the MBPP phase down and the general economic condition nationally is difficult if not impossible.

The Parks and Recreation Department created and maintained softball leagues in response to development. The number of teams doubled at the peak of construction. Again, both long-term residents and newcomers participated in the softball program.

Chapter V

Stratification

Stratification refers to the distribution of resources and power among social groups in a particular social system. The distribution of resources in a community affects how a community reacts to energy development and, hence, how the development affects the well-being of community members.

Wheatland was a fairly homogeneous, agricultural community prior to the development of the MBPP. The most obvious long-term effect of development on the system of stratification has been the increase in the number of professionals in the community related to the operational aspects of MBPP and the large number of unionized construction workers associated with the construction of MBPP. The stratification system in the community is made up of the following groups:

1. Ranchers/farmers - owners of agricultural land who derive their income from the productivity of the land.
2. Professionals - lawyers, bankers, school teachers, and the professional operators at MBPP.
3. Businessmen/owners - individuals who derive their income from their own businesses in which they work.
4. Workers -
 - a. long-term residents who use their manual skills to produce income.

- b. construction workers associated with MBPP - newcomers, commuters, and short-term residents.
- c. manually skilled operators at MBPP.
- 5. Farm labor - Mexican-American farm labor, illegal immigrants, etc.
- 6. Poor - welfare recipients.
- 7. Transient "camp followers" - non-union, non-skilled, poor, and mobile.

As with most systems of social stratification, this one melds the economic, political, and social aspects of life together. Thus, one's position in this stratification system determines one's access to economic, political, and social resources in the community.

As is the case in many western communities, ranchers and farmers are influential at the county level. Consistent with other developing areas in the West, this group tends to maintain political power and influence with energy development, at least in the short run. Theoretically, however, one could expect that as the primary economic base of the community shifts from one mode of production to another, so might political power. This is especially the case in developing areas (internationally) where economies shift from an agricultural base to an industrial base. The exception, of course, is when the old elites join forces with the industrial elites to bring about change. In and around Wheatland it appears that the ranchers and farmers did not join with the "industrialists" to bring about change. (The question arises; "Is building a power plant industrialization?" The answer, most likely, is "no". Power plants by themselves, when built

in rural areas, probably can best be described as a form of pseudo-industrialization. In true industrialization, an industry stimulates the growth of industrial suppliers to that industry such that other industries are built up to supply component parts or processes at various stages of manufacturing. Such a system is referred to as "vertically integrated" and is desirable in terms of economic development. Power plants typically produce no such associated industry.) It is unlikely that the economic base of the community will continue to shift away from agriculture because of the power plant. Thus, it can be expected that conservative agricultural interests will continue to be predominant at the county level. The one exception to this is if industry utilizing waste hot water from MBPP can be attracted to Wheatland.

The number of professionals in Wheatland has increased with the construction of the MBPP. The most notable temporary increase probably came with school teachers; however, the most notable long-term effect will come from the professional part of the permanent operating work force at MBPP. Respondents in personal interviews indicated the professional operating work force at MBPP would be a welcome set of newcomers to the community adding diversity, status, and income to the community.

The number of businessmen and business owners in Wheatland has remained relatively stable during development, increasing only slightly with the increased population growth. The relative stability in this group can be attributed to two things: (1) people realized the temporary nature of the population "boom" and (2) new businesses

were developed by local businessmen. Often new businesses were merely expansions of existing businesses. Again, the large number of daily and weekly commuters involved with the construction of the MBPP probably attributed to the relative stability of this group.

The workers in the Wheatland area can be classified into three groups. They are: workers who have been long-term residents of the area; construction workers associated with MBPP who are temporary residents of the area (or commuters); and permanent operators at MBPP who are newcomers and likely to be permanent residents of the community. Workers who have been long-term residents of the community form a separate category regardless of whether they work for MBPP because they are most probably integrated into the community. Traditionally, these people have been employed by the railroad, various governmental entities, and mining.

New construction workers associated with MBPP have had an impact on Wheatland. Although the peak construction work force reached 2,344 in 1979, it has been estimated that over 32,000 construction employees have worked at constructing the power plant. It is important to note that, whereas the construction work force never exceeded 2,344, the flow of labor necessary to build such a plant is tremendous. The short duration of any one construction job probably lessens the impact of such a construction work force on a community. With such rapid turnover, one could not expect the construction work force to become a cohesive group, politically influential, or involved in the community. Also the large number of subcontractors involved with MBPP contributes to the atomization of the construction work force. Thus, the large

task of building a power plant is broken down into many smaller tasks where each subcontractor is responsible for hiring and firing labor for their particular assigned jobs.

The manually skilled, permanent operators at MBPP will have a long-term effect on the community. Since the plant is not fully operational (only two of the three units of the plant have become operational), it is difficult to assess the impact of this group on the community. However, this group is and will be paid relatively good wages, and their jobs should be secure. This group, along with the professional operating personnel, will probably become increasingly influential in community affairs. This should be the case for three reasons: their income is relatively high, the permanent operating positions are relatively high status, and the power plant forms a large portion of Platte County's tax base.

The farm labor in and around the Wheatland area is largely Mexican and Mexican-American. Very little is known about this group because many of the individuals comprising this group are illegal aliens. With the traditional agricultural base in the county, the hiring of illegal aliens is an accepted business practice. Negative sanctions have been used against some who have brought the matter to the attention of the Immigration and Naturalization Service. Regardless of the legality of such practices, agriculture (farming in particular) in the area benefits from the presumed lower pay scales. The continuation of such practices merely assures continued economic viability of agriculture in the area. There is no reason (locally) to think these practices will be threatened in the future. Federal

legislation could affect the situation, but the number of illegal aliens versus legal immigrants is unknown. Because of this unknown, the effects of reducing the flow of illegal aliens into the United States is unpredictable in the Wheatland/Platte County area.

Poor welfare recipients represent one of the lower groups in the stratification system in this community. This group is represented by the unemployed people who find it impossible to work because of age, illness, handicaps, number of children, lack of skills, etc. Development has passed these people by. Development, in fact, has made life more difficult for these people because of increased competition for community resources (i.e., housing). As can be noted from Table 4-4, the percent of the total county population receiving some type of public assistance has actually decreased with development. One must interpret this, however, not as a reduction of the actual number receiving assistance but as a relative reduction in the number receiving assistance. Specifically, the number of individuals receiving any type of welfare monies has not increased proportional to the county population. The effects of energy development on this group of people is often cited in impact literature. It should be pointed out, however, that the Impact Task Force did address some of these problems early on. The result was that a senior center was built with 28 apartment units. Housing for low income groups was a major concern of the task force from the earliest planning stages; however, this need was never fully met.

The lowest rung on the stratification "ladder" is probably occupied by the transient "camp followers" who arrived in town because

they heard there was easy money to be made. Members of this group usually lack the skills necessary for anything higher than the job of laborer and, more importantly, lack union membership. This group has been identified by local officials as being the source of many problems associated with development. This group works only occasionally, is mostly excluded from the benefits of development and is mostly ambivalent toward the local community. Local respondents characterize this group as the drags one must take with development. These are the "hangers-on" who accompany development - the pimps, prostitutes, thieves, drug dealers, and itinerant unskilled labor. This group's association with development is perceived as inevitable, but respondents feel this group leaves with the construction work force. Thus, this group has been declining in numbers since the peak of construction. Unemployed construction workers are not viewed to be a part of this group. It is generally perceived that construction workers leave town within a few weeks of being laid off at MBPP. This situation has probably been true in the past because of the continued energy development in the West. Only recently has the general economic downturn been felt in the energy-related fields in the West. One construction employee said that this was the first time that he had ever seen laid off construction workers who did not know where they were going next.

Overall, the main change in the stratification system in Wheatland has come with the permanent operating work force at MBPP. This group will increase the size of the professional group in the community. This group will also bring more income, diversity, new

ideas and, inevitably, political change into the community. The increased size of the professional group, added to the increased formalization of local procedures and increased reliance on professionals, could enhance this group's position vis-a-vis political power at the municipal level. There is no reason to believe that there will be any political change in the short term in the county. The group of county residents involved with agriculture will continue to exercise power unless significant industrial development can be attracted to Wheatland or the county.

Chapter VI

Extra-Local Linkages

6.1 Extra-Local Linkages (Outside Linkages)

Extra-local linkages refer to ties to organizations and groups outside of the community by organizations and groups within the community. The increase in the number of these ties means different things when the increase occurs in the economic, political or social realms of community life. Thus extra-local linkages will be discussed separately in reference to each of these realms.

6.2 Political Linkages

Political extra-local linkages refer to political entities being connected to or associated with other political entities outside the immediate area. Such linkages can be defined as positive when they help to coordinate activities, share expertise, make local concerns known at higher levels of government, and plan on a regional basis. Such linkages can be defined in negative terms when local communities lose control over local situations or when they become entangled in successive layers of bureaucracy.

The primary extra-local linkage that developed in the early stage of development was with the Industrial Siting Administration (ISA). Here the ISA had the authority to control development so as to minimize the impacts on such towns as Wheatland. Since the MBPP took place in the county, Wheatland would have been unable to exercise any

control over the conditions of development except through the county commissioners. The ISA, however, made such control possible through the industrial siting process. Through interaction with local officials, the ISA mandated arrangements that provided for orderly, responsible development in the Wheatland area.

The Wheatland Police Department has maintained the same extra-local linkages since before the MBPP. That is, the department maintains about the same level of interaction with state and federal crime agencies as it did before development. The increase in linkages for the police department has come with local social service agencies. Specifically, the police department ends up referring more cases to agencies that either did not exist prior to development or that have expanded since development. These linkages to social service agencies are viewed in positive terms by the police department.

In terms of political extra-local linkages, Wheatland has experienced little change with development. Other than the above-mentioned linkages, Wheatland has been host to city/town administrators from around the region to discuss how Wheatland came through the rapid population growth so well.

6.3 Economic Linkages

Extra-local economic linkages refer to connections or interconnections between economic organizations in a community and those outside of a community. Increases in such linkages can mean a shifting of the locus of control outside of the community. The negative aspect of this is that decisions may not adequately take into

account the local context of the community. Thus decisions could be made that are not in the best interest of the community. The main positive effect of increased economic linkages is that the local economy becomes better interlocked with the national and international economy. Such interlocking would only be described as positive if the economic relationship was not a dependent one (the community being economically dependent on some economic "center") and if the local economy was not forced into one particular phase of production.

The major example of increased extra-local linkages in the economic sphere is the Missouri Basin Power Plant Project that is now being completed outside of Wheatland. The locus of control for the MBPP is in Bismarck, North Dakota. Some residents felt that decisions about the plant, water acquisitions, dam location and design, and transmissions lines "did not fit the local situation". That is, decisions were made at company headquarters hundreds of miles away without concern for local residents. Whether this was the case or not, many of the decisions which affected Wheatland were made in Bismarck, although the possibility exists that, even if decisions were made locally, they could reflect the best interests of the company rather than the community. It was generally perceived that Missouri Basin was a "good company to work with", that is, that they were responsible for, and responsive to, community needs during the impact stages. Many residents view Missouri Basin in positive terms and view the Industrial Siting Administration as the key organization watching after the community interests.

Other economic links to extra-local economic organizations were provided by the use of unionized labor and subcontractors for building the MBPP. Table 6-1 lists the consulting engineers and contractors who worked on the MBPP. As can be noted, as of August, 1978, there had been 87 different contractors, and most of these were from outside of the immediate area. The fact that these contractors used unionized labor doubled the extra-local linkages. The contractors were linked to their home offices and the unions were linked to their union centers. Union disputes, however, appeared to be of local origin. There are some in the community who believe union agitators from outside the area were sent in to stir up union members, but there is no proof of such involvement.

For the most part, businesses in the area did not link up with national franchises as a result of development. There was some business expansion to meet the increased demand, but for the most part, this expansion was by locally owned and operated establishments. The major exception to this was the building of a large Safeway grocery store in a new shopping center complex. (This actually represented a move from a downtown location.)

6.4 Social Linkages

Extra-local social linkages refer to social interactions of individuals or local groups with individuals or groups outside the local community. The most important linkage was between construction workers and their "home community". Although little is known about these linkages, it can be assumed that maintenance of these links

Table 6-1
MBPP-Related Contractors

PROJECT MANAGER

Basin Electric Power Cooperative

CONSULTING ENGINEERS

Burns & McDonnell Engineering
J.T. Banner & Associates, Inc.

CONTRACTORS

A & H Reynolds
Alco Fence Company
Allied Structural Steel
Alpine Engineering
AMCO Electric
American Steel & Ironworks
Anderson Survey
Ari Brothers Trucking
Automatic Sprinkler
Babcock & Wilcox
Belding Corporation
Cencor Corporation
Brand Insulation
Brind Construction
Caisson Drilling
Case-Cotter
Ceilcote Company
Centric Corporation
Certified Welding
Chen & Associates
Cherne Construction
Cipra, Inc.
Colorado Metal Mfg. Co.
Colorado Partition & Drywall
Commonwealth Electric
Dominion Construction
Earl F. Douglass Roofing
Eaton Metal Products
Fischbach & Moore
Flatiron Pre-Mix
Frontier Contracting, Inc.
Fuellgraff
Garney Utilities Company
General Electric
Heede International
Heggen-Lundquist
Helbert Masonry, Inc.

MBPP-Related Contractors (con't)

Hennes Erection
Henriksen Company
Hensel Phelps, Inc.
Hensel Phelps-Luhr Brothers, Inc.
Industrial Contractors
Jerry Grosvenor Masonry, Inc.
J.D. Steel
Johns Manville
Kennedy Electric
Kenney Construction
Lidstrom, Inc.
Marathon Steel Company
McFarland Roofing
Midwest Conveyor
Montgomery Elevator
Morrison-Knudson
Multi-Amp
Nardi
National Valve & Manufacturing Co.
Natkin & Company
Northern Testing
Oliver Construction/Plasteel Products
Pancratz Company
Phoenix Contracting
Pioneer Equipment
Premier Water Proofing
Process Pipe
R.W. Vaught
Railroad Builders
Randall & Blake
Reiman-Wuerth
Reliance Trucking
Research Cottrell
Robert Shaw
Rust Engineering
Shurtleff & Andrews
Special Coatings Corporation
State Painting
Storey Electric
Strong Brothers
Subgrade Construction Company
Temcor
Teton Construction
Twin City Testing
Venetian Ironworks
Western States Masonry
Westinghouse Electric
Wismer & Becker

Source: Missouri Basin Power Project Socioeconomic Monitoring Program, "Socioeconomic Impact Monitoring Report #25", August, 1978.

provide for the continued diversification of ideas, attitudes, and values within the community (discussed under social differentiation).

Although much less prevalent, some social linkages outside the community were developed by long-term residents in order to send their children outside of the "impacted area" for school. These linkages usually meant that part of the family moved to a neighboring county so the children would not have to go to schools full of "transients". Most likely, the number of these linkages is quite small and is probably unimportant in terms of community change. This response by some local residents is interesting to the extent that the anticipated consequences are perceived to be great enough to warrant familial separation for several years.

The main effect of extra-local social linkages has probably been to add to the diversification and differentiation in the community. Some construction workers have defined Wheatland as a desirable place to live and have set about establishing residency, thus insuring continued extra-local linkages to their family and friends outside of the area. The lack of a diversified economic base (and the general economic decline nationally) has made remaining in Wheatland impractical for most construction workers. (Platte County is currently experiencing one of the highest unemployment rates in the state.) The permanent operating work force who in-migrated for jobs at the power plant will most likely be the group who maintains the extra-local ties of association.

Chapter VII

Integration

7.1 Integration (Coordination/Cooperation)

Community integration has been defined in many ways by classical and contemporary sociologists. We define it, for purposes of this study, as "the process by which relationships among people in a community are coordinated and interconnected". As many authors have noted, there is almost always an implicit value connotation tied to the discussion of integration. We explicitly attach a value meaning to the concept as we use it here. The better integrated a community is, the greater the well-being of the majority of its members, given the resource limits of a particular community. That is, the members of a well-integrated community successfully coordinate themselves to make beneficial use of their resources, including their skills and aspirations.

In relation to energy development in the West, there is a good deal of discussion and media attention on notions of "cohesive" communities, of towns with a "sense of community". Such towns are said to be characterized by adequate, well-kept public facilities, by sound public financing, by successful and well-managed retail and commercial stores, by people who have a sense of trust in and belonging to the community. People characterize towns by whether its residents are "cooperative and friendly" or quarrelsome and composed of factions or cliques who do not get along.

It is this notion of an integrated community which we wish to pursue here. Energy growth and the rapid influx of new people can affect the integration of a community in many ways. Much of the boom town literature has implied that rapid growth almost always leads to less integrated communities. Social, economic, and political integration will be discussed in reference to energy-related growth in Wheatland, Wyoming.

7.2 Political Integration

Political integration refers to the integration between political entities. The main concern for residents living in and near Wheatland is the lack of integration between the city and the county. As is often the case in energy development, counties receive the largest portion of the new tax dollars (derived from energy development within the county), and the city receives the population impact. In Wheatland, many residents feel this is the case. Specifically, they feel that the county commissioners are too tight-fisted in sharing new tax dollars. On the other hand, county residents feel that the "city folk" want many urban amenities when the town is too small to support such services. This issue has just been highlighted in the area because of a vote coming up to decide whether or not to reinstitute the optional one percent sales tax. As a generalization, it appears city residents are in favor of the increase in sales tax, and the county residents are opposed to it. At the time of interviewing, the county commissioners were perceived to be in "quiet non-support" of the tax while city officials were perceived as busy trying to convince

voters of the benefits. The additional one percent sales tax was used in the county until November of 1980 when it was defeated in a general election.

During the development stages of the MBPP, creation and subsequent funding of the Parks and Recreation Department indicated the lack of political integration between the city and the county. The department started out with grant money under the county, but the county refused to fund the department after the grant monies expired. Eventually the department was funded through the school district for taxing purposes. Some people in the county resent such an apparently "frivolous" expenditure while city residents point with pride to the new swimming complex under construction.

The lack of political integration between the city and the county relates most probably to the different economic bases, different needs and wants, and differential access to services. Basically county residents involved in agriculture need fewer urban amenities and must drive to town to obtain the ones they want. Thus, county residents do not benefit to the extent that city residents do from the same services or facilities.

7.3 Economic Integration

Economic integration refers to the coordination and interconnectedness found in the business community. In Wheatland the business community appears to be well-integrated. Some of the outward signs of integration have appeared with development. Specifically, the Chamber of Commerce was formed after MBPP was underway. At

present they have monthly meetings, a secretary/editor, and a newsletter. The Chamber of Commerce is also involved with the Economic Development Committee that originated with the task force.

Other organizations representing economic integration are the Lions Club, Kiwanis, and the Retail Business Association. If the monthly Lions Club luncheon is any indication of the interaction between local businessmen, one could indeed assume the community is fairly well-integrated at the economic level. One meeting attended by this interviewer enjoyed a "full house," active and congenial interaction, and a good meal (provided regularly by the Methodist Women).

Businessmen in Wheatland, for the most part, have reason to be concerned with the effects of development. Specifically, the construction slowdown corresponding to a general nationwide economic down-turn, has hit these businesses hard. At least one business (a building supply business) has gone bankrupt, and others are good candidates. Despite this, business people in the area are guardedly optimistic that business will get better. They feel this way for two reasons: one, they hope that other industry can be attracted to Wheatland; and, two, they feel that businesses, for the most part, did not overbuild during the boom.

7.4 Social Integration

Wheatland appears to be a fairly well-integrated community, especially at the social level. Memberships in voluntary associations such as churches, softball teams, bowling leagues, and such groups as

the Platte County Players indicate individuals are connected to their community.

Other voluntary associations in the area are centered around particular groups or interests in the community. Specifically, the Laramie River Conservation Council is a voluntary organization comprised of people with agricultural interests. The group was an indirect product of the Missouri Basin Power Plant in that it arose to protect agricultural water interests from what was viewed as industrial encroachment. A similar group was the Goshen-Platte Protection Association.

Churches seem important for social integration in Wheatland. There are 26 churches in the Wheatland area, and several of these represent recent divisions in pre-existing congregations. Interestingly, the splits in established congregations do not seem to be related to development. Local respondents indicated that the splits were the result of disputes among long-time residents within given congregations. Churches in the community have a ministerial organization that links the ministers of the various congregations together for church-related community action.

Fraternal organizations such as the Odd Fellows and Masons are also present in Wheatland. Other examples of social integration through voluntary association are the Art Guild, Young Farmers, Concerned Organization of Parents for Exceptional Children (COPE), 4-H, Authors' Ink (for writers), Bulldog Booster Club, and the Wheatland Chapter of the Cheyenne Ski Club.



Chapter VIII

Indicators of Community Well-Being

8.1 Introduction

Indicators of the social well-being of Wheatland and Platte County are presented in this chapter. Two sets of indicators, behavioral and material, are presented. The measures of social behavior are intended to provide indications of the social processes and dysfunctions within the community. The indicators of material well-being are included to depict the economic structure of the community and because there seems to be a relationship between social and economic well-being. The nature of that relationship will be examined more carefully in subsequent sections of this chapter.

Although the focus of this report concerns the social community which includes Wheatland and surrounding areas, most of the data for the well-being indicators are reported only on a county basis. Therefore, the figures should be examined with caution.

8.2 Behavioral Indicators of Well-Being

The behavioral indicators addressed in this section of the chapter include incidence of divorce, suicide, and crime.

8.2.1 Divorce

The incidence of divorce and divorce rates for Platte County and the State of Wyoming are shown in Table 8-1. The rate of divorce in both Platte County and the state have been generally increasing since

Table: 8-1

Incidence and Rate of Divorce for Platte County
and the State of Wyoming, 1970 to 1980

Year	Platte County		State of Wyoming	
	Incidence	Rate/1,000 Population	Incidence	Rate/1,000 Population
1970	27	4.16	1,797	5.41
1971	30	4.48	1,988	5.86
1972	37	5.61	2,218	6.41
1973	41	6.00	2,275	6.45
1974	57	8.14	2,523	6.97
1975	45	6.19	2,835	7.53
1976	34	4.43	2,850	7.30
1977	55	6.63	3,068	7.56
1978	70	7.95	3,130	7.38
1979	59	NA	3,510	7.80
1980	108	9.02	4,002	8.52

Source: State of Wyoming, Department of Administration and Fiscal Control, Wyoming Data Book, 1981.

1970. Caution should be used in interpreting rates when the initial number of cases is small. Also with the low absolute numbers the rates are sensitive to slight fluctuations in the number of divorces.

The increased frequency of divorce in Platte County is undoubtedly linked to a number of factors. It appears the national trend is being followed at both the county and state levels. Since the county and state divorce rates roughly parallel each other, statements about the effects of energy impacts on divorce in the county cannot be made.

8.2.2 Suicide

The incidence and rate per thousand population for suicide is shown for Platte County and the State of Wyoming in Table 8-2. Because of the lack of suicides in given years in Platte County and the low absolute numbers of suicides in other years, no trends in the suicide rate can be observed at the county level.

8.2.3 Crime

The incidence and rate of FBI Part I offenses for Platte County from 1970 to 1980 are shown in Table 8-3. The incidence of homicide, rape and robbery are quite low in Platte County from 1970 to 1980. In 1979 and 1980 the number of incidences increased somewhat.

Both the incidence and rate of aggravated assault has been increasing in the county over the last decade. Although the number of incidences are quite small, local law enforcement personnel agree this has been one of the main areas of their concern.

Table: 8-2

Incidence and Rate of Suicide for Platte County
and the State of Wyoming, 1970 to 1979

Year	Platte County		State of Wyoming	
	Incidence	Rate/1,000 Population	Incidence	Rate/1,000 Population
1970	0	-	65	0.20
1971	3	.45	66	0.19
1972	2	.30	70	0.20
1973	0	-	62	0.18
1974	0	-	62	0.17
1975	2	.27	66	0.18
1976	1	.13	69	0.18

Source: Wyoming Research Corporation, United States Geological Survey
Data File, 1981.

Table: 8-3

Incidence and Rate of FBI Part I
Offenses for Platte County, 1970 to 1980¹

Offense		1970	1971	1972	1973	1974	1975	1976
Homicide -	Number	1	1	0	0	0	0	0
	Rate	0.15	0.15	0.00	0.00	0.00	0.00	0.00
Rape -	Number	1	0	1	1	1	0	0
	Rate	0.15	0.00	0.15	0.15	0.14	0.00	0.00
Robbery -	Number	0	0	0	0	0	0	0
	Rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aggravated Assault -	Number	10	4	0	4	3	5	10
	Rate	1.54	0.60	0.00	0.59	0.43	0.69	1.30
Burglary -	Number	24	4	8	10	8	4	13
	Rate	3.70	0.60	1.21	1.46	1.14	0.55	1.69
Larceny -	Number	24	12	16	11	8	4	10
	Rate	3.70	1.79	0.91	1.61	1.14	0.55	1.69
Motor Vehicle Theft -	Number	3	3	0	5	5	3	2
	Rate	0.46	0.45	0.00	0.73	1.71	0.41	0.26
Total Part I Offenses -	Number	63	24	15	31	25	16	35
	Rate	9.71	3.58	2.27	4.54	3.57	2.20	4.56

¹Rates are calculated as number of offenses per 1,000 population.

Source: Wyoming Research Corporation, United States Geological Survey
Data File, 1981 and Colorado Bureau of Investigation, 1981.

Table: 8-3

Incidence and Rate of FBI Part I
Offenses for Platte County, 1970 to 1980¹

Offense		1977	1978	1979	1980
Homicide -	Number	0	0	0	3
	Rate	0.00	0.00	NA	0.25
Rape -	Number	1	0	4	1
	Rate	0.12	0.00	-	0.08
Robbery -	Number	1	0	2	0
	Rate	0.12	0.00	-	0.00
Aggravated Assault -	Number	10	13	77	18
	Rate	1.20	1.48	-	1.50
Burglary -	Number	3	17	54	64
	Rate	0.36	1.93	-	5.34
Larceny -	Number	12	20	150	163
	Rate	1.45	2.27	-	13.61
Motor Vehicle					
Theft -	Number	3	6	25	26
	Rate	0.36	0.68	-	2.17
Total Part I					
Offenses -	Number	30	56	312	275
	Rate	3.61	6.36	-	22.95

¹ Rates are calculated as number of offenses per 1,000 population.

Source: Wyoming Research Corporation, United States Geological Survey
Data File, 1981 and Colorado Bureau of Investigation, 1981.

Burglary, larceny, and motor vehicle theft have also been increasing in the last part of the decade (1978-1980). It would be difficult with the available information to isolate the influence of the phase down of the Missouri Basin Power Plant Project from the influence of the general national economic slowdown. Both of these undoubtedly account for some of the increases in the last three categories.

8.3 Material Indicators of Well-Being

The material indicators of well-being included in this section of the chapter are employment by sector and per capita income. A discussion of these indicators for Platte County is presented.

8.3.1 Employment by Sector

Employment in agriculture, mining, construction, manufacturing, transportation, wholesale trade, retail trade, finance, service, and public administration for the years 1971 to 1977 is shown in Table 8-4. The major change with employment has been the increase in total employment of 646 in the county from 1971 to 1977. This represents a 21.2 percent increase over that time period.

Associated with the increase in employment is the slight shift in employment from agriculture to construction and retail trade. This represents some economic diversification in the county.

8.3.2 Per Capita Income

Per capita income for Platte County and the State of Wyoming from

Table 8--4

Employment by Major Industrial Sectors for Platte County 1971 to 1977

Industrial Sector	1971	% of Total	1972	% of Total	1973	% of Total	1974	% of Total	1975	% of Total	1976	% of Total	1977	% of Total
Agriculture	758	24.6	767	25.1	771	24.6	784	23.8	764	22.4	772	21.5	733	19.7
Mining	256	8.3	259	8.5	269	8.6	291	8.8	301	8.8	292	8.1	324	8.7
Construction	103	3.3	41	1.3	60	1.9	75	2.3	128	3.8	213	5.9	249	6.7
Manufacturing	43	1.4	52	1.7	66	2.1	73	2.2	77	2.3	84	2.3	70	1.9
Transportation	160	5.2	161	5.3	163	5.2	177	5.4	170	5.0	181	5.0	181	4.9
Wholesale Trade	33	1.1	33	1.1	38	1.2	45	1.4	36	1.1	38	1.1	37	1.0
Retail Trade	419	13.6	409	13.4	421	13.4	466	14.1	514	15.1	538	15.0	575	18.1
Finance	48	1.6	54	1.8	54	1.7	61	1.8	71	2.1	76	2.1	87	2.3
Service	301	9.8	278	9.1	243	7.8	258	7.8	287	8.4	307	8.5	351	9.4
Public Adm.	643	20.9	677	22.1	703	22.4	711	21.5	692	20.3	712	19.8	713	19.2
Misc.	313	10.2	330	10.8	344	11.0	360	10.9	367	10.8	381	10.6	403	10.8
Total	3,077	100.0	3,061	100.0	3,132	100.0	3,301	100.0	3,407	100.0	3,594	100.0	3,723	100.0

Source: U.S. Department of Commerce; Bureau of Economic Analysis and the State of Wyoming Department of Administration and Fiscal Control Wyoming Employment Report, December, 1979.

1970 to 1980 is shown in Table 8-5. The per capita income for both the county and the state have been increasing over the last ten years. In each year, however, Platte County per capita income has been below the state average. Also the state per capita income has been increasing at a faster rate than the county income. The county per capita income increased 121.8 percent from 1970 to 1980 while the state's increased 195.0 percent over the same time period.

8.4 Overcapacity in the Post-Boom Period

The Missouri Basin Power Plant Project is currently being completed. Early on in the development, mitigation focused on schools and housing.

8.4.1 Schools

Table 8-6 shows the student capacity and enrollment for School District #1. As can be noted, the total capacity of the school district is 2,536 students and current enrollment (3rd quarter 1981) was 1,798. This indicates a utilization rate of 71 percent. Table 8-7 shows the actual enrollments, MBPP project enrollments and the percent of project enrollments to the total. The student enrollment build-up can be noted to coincide with increases in project enrollments. Project enrollments peaked in the 1980-81 school year and is in the process of declining now. At the start of the 1981-82 school year there were 553 project-related students in the school district accounting for 30.8 percent of the total enrollment at that

Table 8-5

Per Capita Income for Platte County
and the State of Wyoming, 1970 to 1980

Year	Platte County	State of Wyoming
	Per Capita Income	Per Capita Income
1970	\$ 3,487	\$ 3,686
1971	3,607	3,945
1972	3,951	4,395
1973	4,834	5,039
1974	4,982	5,678
1975	4,734	6,119
1976	5,274	6,791
1977	6,103	7,558
1978	6,760	8,572
1979	7,664	9,798
1980	7,735	10,875

Source: U.S. Department of Commerce, Bureau of Economic Analysis,
Washington, D.C.

Table 8-6

Facilities Utilization; Platte County School District #1

School	Student Capacity	3rd Quarter, 1981	
		Number	Percent
<u>Wheatland</u>			
Libbey Elementary	500	446	89%
West Elementary	751	416	55
Junior High	325	258	79
High School	600	474	79
<u>Chugwater</u>	160	78	49
<u>Glendo</u>	300	126	42
Totals	2,536	1,798	71%

Source: Platte County School District #1 Records and "Socioeconomic Impact Monitoring Report", Western Research Corporation, 1981.

Table 8-7

Actual and Projected MBPP-Associated Enrollments;
Platte County School District #1

School Year	Actual Enrollments	Project Enrollments	% of Project Enrollment to Total
1976-77	1,529	N/A	N/A
1977-78	1,684	251	14.9
1978-79	1,966	261	13.3
1979-80	2,115	732	34.6
1980-81 (Sept.)	2,151	804	37.4
1980-81 (Dec.)	2,117	762	36.0
1980-81 (March)	2,029	726	35.8
1980-81 (June)	1,973	704	35.7
1981-82 (Sept.)	1,798	553	30.8

Source: "Socioeconomic Impact Monitoring Report", Western Research Corporation, 1981.

time. It appears the schools in the district (especially the elementary schools) will have excess capacity in the post boom period.

8.4.2 Housing

The availability and utilization of Black Mountain Village (project sponsored housing) is shown in Table 8-8. As of the third quarter, 1981, 57 percent of the housing and mobile home lots were being utilized overall. Specifically, 56 percent of the mobile homes, 58 percent of the mobile home pads, 56 percent of the RV pads and 45 percent of the single family home lots were being utilized.

This company sponsored housing program with bachelor quarters, cafeteria and recreation center did much to help alleviate impact. It contributed to the community by ensuring orderly development of mobile home spaces with curbs, gutters and paved streets. It ensured against over building by the private sector and provided for the transition of Black Mountain Village into a residential neighborhood upon completion of the project.

The phase down of the project has meant that mobile homes and the bachelor quarters have been sold and moved to other projects in the region. The permanent cafeteria and recreation center are currently being offered for sale to the school district and town. The selling of single family residential lots, however, has not gone well. Recently MBPP asked to have part of the land rezoned for use for mobile homes. The plan is to sell permanent mobile home lots instead of residential lots. Whatever the costs of developing Black Mountain Village, the cost and risk was well placed. The company's willingness

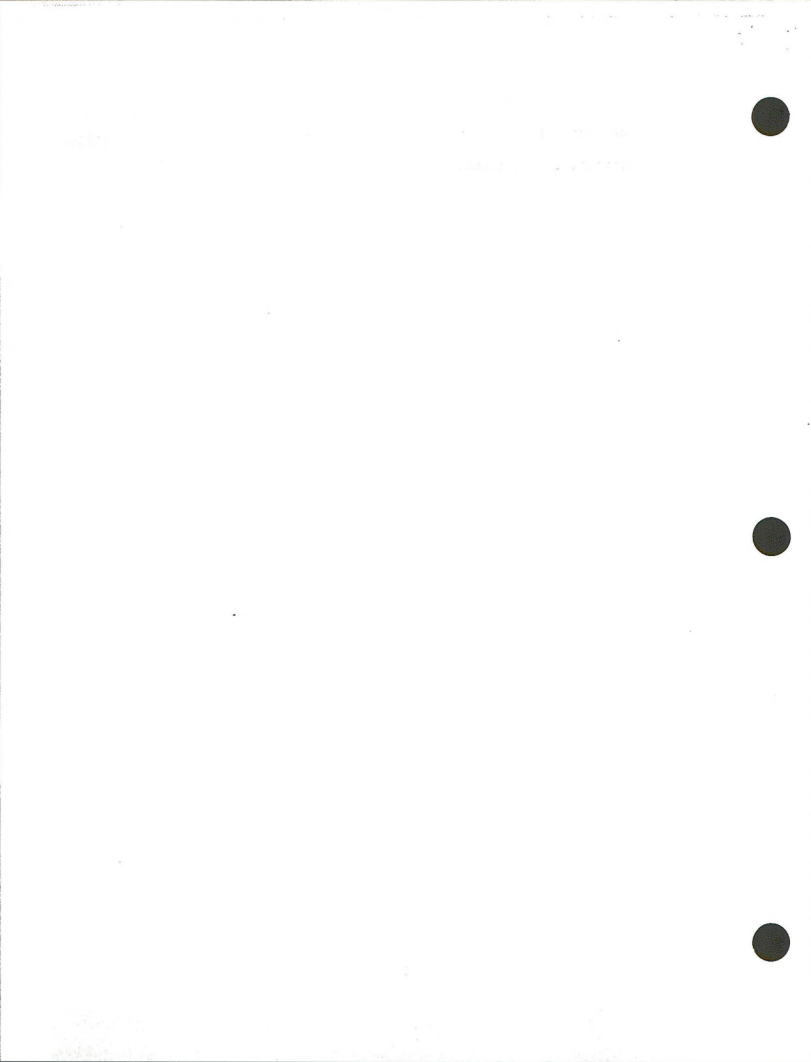
Table 8-8

Availability and Utilization of
Black Mountain Village Housing Units, Third Quarter, 1981

Housing Type	Number Available	Units Occupied	Units Vacant	% Capacity Utilized
Mobile Homes	78	44	34	56%
Mobile Home Pads	390	228	162	58
RV Pads	314	177	137	56
Single Family Home Lots	<u>49</u>	<u>22</u>	<u>27</u>	<u>45</u>
Totals	831	471	360	57%

Source: MBPP Monitoring Staff and "Socioeconomic Impact Monitoring Report", Western Research Corporation, 1981.

to provide housing, absorb the cost of housing and mobile home spaces and work with the community in the planning process helped to minimize impacts in Wheatland.



Chapter IX
Summary of the Effects of Energy
Development on Community Life

Introduction

In the preceding chapters social change has been examined primarily in reference to differentiation, stratification, integration, and extra-local linkages. The first part of this chapter will summarize these findings. The second part of this chapter will summarize the effects of social change in the community as viewed by local residents.

Sociological Definition of the Situation. Wheatland, Wyoming has not been industrialized by the building of a power plant on the outskirts of town. Wheatland was merely the host for a portion of the large construction work force that was responsible for building the power plant. Wheatland came through the experience fairly well, and for this reason it is often used as an example of the way development should be handled. It seems there are at least four good reasons why development proceeded relatively smoothly with the Missouri Basin Power Project. They are:

1. There was a large percentage of daily and weekly commuters.
2. The task force was formed in the early planning stages to help plan to alleviate impacts.

3. The Industrial Siting Administration, working with Missouri Basin, was able to arrange for many of the anticipated impacts to be mitigated.
4. Missouri Basin provided bachelor quarters, a mess hall, mobile home spaces, recreational vehicle pads, and a recreation center at Black Mountain Village.

Both local residents and researchers attribute much of Wheatland's success in handling impact to some combination of the above. Development of the MBPP has changed Wheatland in irreversible ways, some of which were positive and some of which were negative. These are discussed below.

In reference to differentiation, it seems the community realized that the surge in population was mostly temporary and, thus, differentiation did not occur to the extent that could be expected with other types of development. In the political realm, the general situation is that local entities did not expand to the point where they now have to contract. The same may not be true in terms of local businesses. Again, however, it is difficult to separate the effects of declining construction on MBPP and the general economic recession at the national level. The social differentiation that has occurred has been welcomed (for the most part) and the various groups are likely to be supported in the future.

Overall, it seems that the large number of daily and weekly commuters and the establishment of Black Mountain Village helped to minimize the impact on Wheatland and effectively kept the community from becoming overly differentiated. The danger would be that

over-specialized structures and organizations could not be supported by a smaller population.

In terms of stratification, it seems that change is inevitable at the county level. Dissatisfaction with the county commissioners' "tight-fistedness" with the new-found wealth could eventually lead to political change at that level. This could especially be the case if Wheatland's population stabilizes at approximately 50 percent of the county's population. In Wheatland one could expect that the professional group will increase in size and become more influential as the permanent operating work force at MBPP settles into community life.

In terms of development, it would seem that the conflict over MBPP exaggerated the differences between at least two of the groups within the stratification system. Specifically, it seemed that agricultural interests and business interests were opposed. The agriculturalists opposed the plant because of water issues while the business interests were in favor of it for increased business opportunities. Once construction is complete, one could presume conflict will die down. There seems to be no real threat that continued industrialization in the area will squeeze the farmers and ranchers out. In fact, it is most likely that the county trend in agriculture will continue to follow national trends. Although many local businessmen are outwardly optimistic about attracting industry to Wheatland, the chances of attracting a sizeable industry appear to be quite small. Distance from markets, distance from raw materials'

sources, cold weather, and a general migration trend toward the "Sun Belt" offer slim prospects for attracting new industry to Wheatland.

In reference to integration, it seems that Wheatland is a well-integrated community. The potential problem seems to be the lack of integration between the county and Wheatland. The county basically represents the agricultural interests in the area, and the city represents the more urban interests. Exacerbating the problem is the existence of small towns in the county representing mining and railroad interests. This is an area of concern that should be watched carefully. Can county agricultural interests be overrun by large concentrations of urban interests?

In terms of extra-local linkages, the role of the Industrial Siting Administration was very important in contributing to or mandating orderly development. The siting permit was one of the first granted by the ISA, and the process should be more closely studied for regional comparisons of effectiveness. It seems, however, that the process was effective in encouraging orderly, responsible development and is perceived that way at the local level.

Socially, extra-local linkages have probably added to the diversity of activities and interests in the area. The long-term effects of this are unknown at present. It can only be presumed that such diversity will add to the perceived quality of life in the community.

Overall, Wheatland did do a good job of handling growth. Corporate responsibility, the industrial siting process, the formation of a task force comprised of local influentials, and the fact that

Wheatland was near large population centers (thus having a large portion of the construction work force able to commute) all interacted to produce orderly development. The long-term consequences of such development are unknown at present. If Platte County attains the increased tax revenue for the expected thirty-year life of the power plant without problems over water, the local residents will probably benefit from having the power plant located within the county. If, for some reason, the plant ceases operating, the county could find itself saddled with large debts that could be difficult to repay. If problems arise over municipal water systems, ranchers and farmers and/or MBPP could end up as the long-term losers.

Residents' Perception of Social Change (Local "Definition of the Situation")

One's perception of, and satisfaction with, community life varies by the way one is connected to the community and the access to local resources one has. As discussed in the section on integration, the explicit value judgement made by these researchers is that the better integrated a community is, the greater the well-being of the majority of its members and generally the more satisfied the residents are with community life. (The researchers here recognize the consensus-conflict argument and note the importance of conflict as an adaptive mechanism in community life. The researchers involved in this project do not view integration and conflict as mutually exclusive categories. Wheatland is basically a well-integrated community that experienced some conflict over the building of a power plant near town.) Assessment of community life does appear to vary

according to one's integration into the community. At the group level, however, integration into community life is related to a particular group's position in the stratification system.

As discussed under the section on stratification, there were seven major groups comprising the social stratification system in and around Wheatland. They were:

1. ranchers/farmers
2. professionals
3. business people/owners
4. workers
5. farm Labor
6. poor (welfare recipients)
7. transients

Since one's position in the stratification system affects one's view of community, each group's "definition of the situation" will be discussed separately.

Ranchers/Farmers. Ranchers and farmers in the Wheatland area defined the building of the power plant in negative terms. The agriculturalists were mainly concerned over issues involving the acquisition, storage, transfer, and loss of water. To date, the Wheatland Irrigation District has spent approximately \$40,000 in legal fees protecting its members' rights. The Irrigation District claims the individual district members pay this cost of development. It is anticipated that there will be additional costs associated with legal battles over the power plant's water arrangements. In general these people think that there is enough water to go around in the good years

but not in the bad. Agriculturalists in the area think that water drawn from the well field by MBPP is lowering the water level in the aquifer, that the Grayrocks Dam was built wrong and has seepage problems, and that the city and county are likely to find the real public costs of the power plant very high in the long run.

In terms of differentiation, some members of this group felt the community had become too specialized to be supported if anything happened to the assessed valuation of the power plant. Specifically, the Parks and Recreation Department's new \$600,000 swimming pool complex and the built up school system were used as examples.

In terms of stratification, the only major change noted was the suspicion that some community leaders benefited financially by supporting construction of the power plant. There is no evidence that anything of this nature took place in Wheatland.

Community integration was viewed by this group to be affected by the disruptive effects of having large numbers of construction workers moving through town. Some expected or perceived the disruption to be so great that they moved their families to adjacent counties so their children would not have to go to school in the impacted county.

The major extra-local linkages were defined in different ways. The linkage between the community and the state of Wyoming's Industrial Siting Administration was viewed very positively. That is, the ISA forced MBPP to mitigate the socioeconomic impacts expected to occur in the community. Along these same lines the link between the community and the University of Wyoming's researchers was viewed positively as an aid to planning efforts.

Viewed in negative terms was the link between the community and Basin Electric. With Basin Electric headquartered in North Dakota, Wheatland residents in this group felt that decision makers were far removed from the consequences of their decisions. They also felt that people in North Dakota making decisions did not know or understand the local situation.

Overall, the ranchers and farmers of the area have had an adversarial relationship with MBPP since its inception. Initial concern was over water, but later concerns centered over loss of local control, increased public debt and the long-term viability of a project so dependent on water in a semi-arid region.

Professionals, Business People, and Owners. The professionals, business people, and business owners can be grouped together in terms of their perceptions of social change in Wheatland. For the most part these people saw MBPP as an economic boom for an otherwise economically stagnant area. These people tended to focus on the positive benefits of an increased tax base, increased business opportunities, and an increased number of urban amenities. As viewed by these people, the construction of the MBPP caused few adverse impact because Missouri Basin was "a good company to work with" and the Industrial Siting Administration made sure that MBPP "paid its own way".

Differentiation in the economic and social spheres was viewed positively by these two groups. They viewed increased diversity in both spheres as adding to the quality of life in Wheatland. With the present economic recession and the phase out of construction at MBPP,

these people think that some new industry can be attracted to Wheatland so once-thriving businesses can pick up again. To this end the task force formed an Economic Development Committee which is now associated with the Chamber of Commerce. This committee is charged with trying to recruit new industry for the Wheatland area.

The professionals, business people, and business owners see Wheatland as a well-integrated small town. Permanent employees of MBPP that have in-migrated have been welcomed into the town. The community, having been defined as a friendly one, welcomed these permanent employees. (The degree to which the construction workers were welcomed is unclear.)

For these people, the stratification system remains roughly the same. Some power and influence may have been gained by the county since Platte County is now viewed as "rich" while Wheatland is viewed as relatively "poor". (It should be pointed out, however, that Wheatland now has a larger percentage of the county population.)

In terms of extra-local linkages, no overall interpretation emerged from the interviews. Overall, these people defined the industrial development (MBPP) in positive terms. The community (working with Missouri Basin) did a good job of coping with the rapid population growth. It remains to be seen how the community will handle the population decline as construction on the power plant is completed. This group is generally optimistic about Wheatland's future.

Workers. This group was broken down into three subcategories which consisted of the following:

1. long-term residents who use their manual skills to produce income.
2. construction workers associated with MBPP--newcomers, commuters, and short-term residents.
3. manually skilled operators at MBPP.

Interviews from this social strata were largely concentrated in the second subcategory. Therefore, views of the "workers" should be considered reflective of the views of MBPP construction workers. Construction workers viewed the community at one point in time. Most have not lived in town long enough to view change over a period of time and those that have returned after some time, define change in terms of more or less crowded. (Now that MBPP is phasing down, the community is less crowded.) In terms of differentiation, this group views Wheatland as a small town, boring and with a general lack of things to do. Since most have not lived in the community for a long period of time, they have no benchmark against which to measure change. These people do view the school system in a positive light.

Construction workers in Wheatland seem to have little desire to integrate themselves into the host community. In general, construction workers maintained interaction with co-workers and neighbors often in Black Mountain Village (MBPP man camp and trailer park). It seemed the lack of integration of this group into the community was based more on the construction workers' preferences than the community's resistance to accept new members.

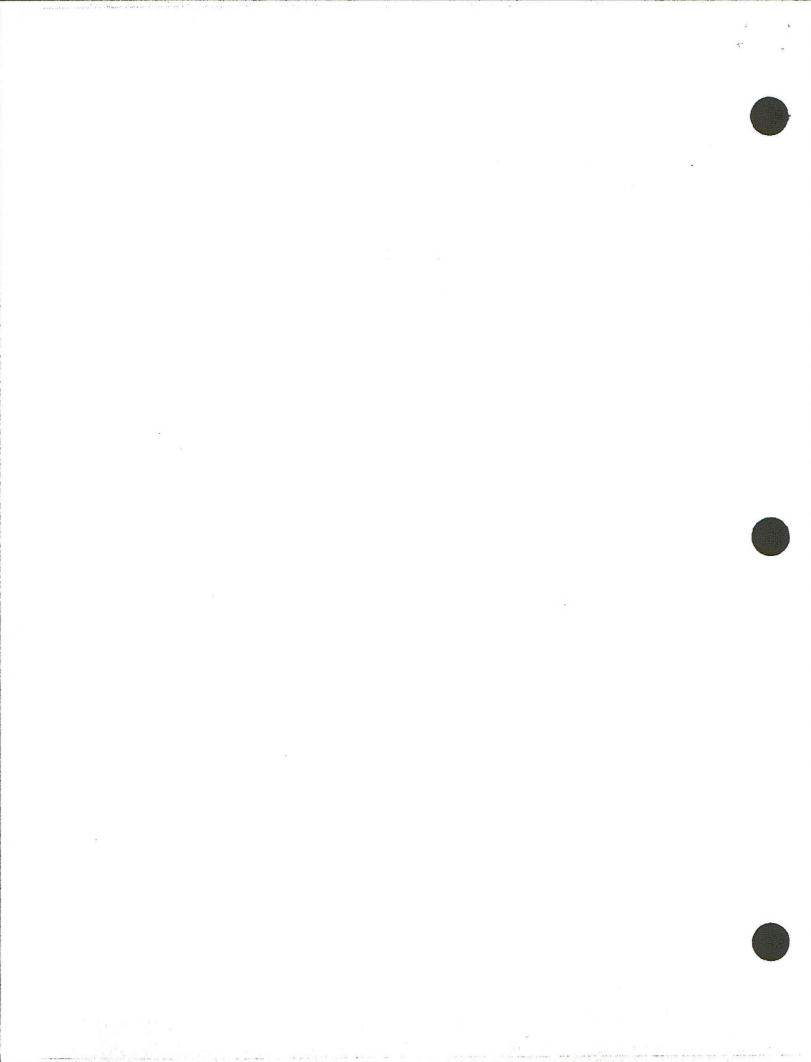
Whereas construction workers had no view of the local stratification system in general, extra-local social linkages were

important. Familial and friendship ties were maintained by construction workers to their "home base". Most seemed to be working out of some "home base" where they had lived previously for a long period of time (usually in proximity to the extended family). These ties were particularly important with the phase down of construction of MBPP and the national economic slump. After leaving Wheatland, several construction workers were going to their base before looking for a new construction job in the region. Several construction workers noted that this was the first time that no one knew where they were going next. No large construction projects were planned to commence within the next few months. Thus several construction workers interviewed simply did not know what to do while others were going to return to their "home bases" temporarily.

In general, construction workers' views of Wheatland, Wyoming ranged from indifference to extreme satisfaction. Ones that were indifferent found the town small and boring. Ones that defined the town in a positive light focused on the friendliness of the local residents, the school system, and Black Mountain Village.

Data on farm labor, the poor, and the transients was insufficient to make generalizations about their definition of the situation, but one can guess that viewing life from the bottom of the stratification system would negatively affect one's view of the community.

APPENDIX A



APPENDIX A
Example Interview Guide

A.1 Agency Interviews

- A.1.1 Interviews with Service Agencies
(school, social services-welfare, law enforcement, public health, mental health, judge if possible)

A.1.1.1 Schools

- 1) Introduce yourself and explain purpose -- want to know how community addressed each of the needs that occurred during period of rapid growth (or last five years).
- 2) Review population data and causes of growth.
- 3) Review school data (have copy ready for them)
Make any corrections/additions or comments. If data not available locally, find out where it would be.
- 4) How has demand changed? Why? (esp. energy growth)
- 5) Has classroom space been adequate and available when needed to meet demand? If not, when was problem period? Why was there the problem? How was it resolved?
- 6) What important changes have occurred in the area of . . .?
Was that a problem? How were problems addressed? What are concerns for future?
 - curriculum/education approach
 - student behavior and characteristics - probe esp. for transiency (check availability of turnover rates)
 - administrative procedures
 - any special programs for newcomers
 - any special problems created by newcomers
 - any changes due to growth
 - financing
- 7) What school-related changes or issues have there been that drew public interest or participation? (e.g., consolidation, new school construction, etc.) Point is to articulate public decision-making process. What are concerns?
 - Who, when, what, how, why. Who were the parties involved?
 - Who was not involved who logically should have been?
 - If there were factions, identify issue and probe for recurrence and for names of prime actors on both sides.
 - Was there a point when problems started being addressed in a new way? When? Why?
- 8) At the beginning of the growth period (or 10 years ago), who were the influentials in the community?

- How has that changed? What was energy development's role? Who were key decision-makers for community during growth period?
- 9) Check for changes in extra-local linkages (source of funds, contacts, source of teachers in-service, etc.)
- 10) In their opinion, were there groups in the community that have been (or would be) affected differently by the growth and energy development?
 - Both positive and negative
 - Who, how and why (seek mechanism and understanding of change and community structure that distributes effects/opportunities) (prompt for employment, housing, services, schools, way-of-life)
- 11) Functional groups and social differentiation:
 - try to get a description of criteria for social differentiation (in pre-growth period if there was one) and of each of the major groups (size, livelihood, geographic location, ethnicity, property ownerships, relationships between groups) How has that changed? (Criteria, groups or group characteristics). The purpose is twofold: (1) to describe structural/organization characteristics of community and (2) to identify attributes of groups that could influence distribution of project effects. Get names of group representatives. (Important for interviewing but also to illustrate familiarity with different strata.)
- 12) Demographic characteristics of respondent
 - position and history of employment
 - length of residence in community
 - where from
 - family characteristics
 - age
 - sex
 - relationship to energy development

A.1.1.2 Law Enforcement

- 1) Introduction
- 2) Review growth data
- 3) Review Part I and Part 2 crime and service provision
 - reported crime
 - calls for service
 - budget
 - uniformed officers and personnel
 - cars
- 4) Did crime and/or calls for service increase during growth period? What are expectations?
 - what types of crime(s)
 - who were (will be) perpetrators?
 - who were (will be) victims? Did (will) crime occur in particular neighborhoods/areas?

- what do they think was (or will be) reason for change?
- (Sheriff, what about specific county problems -- trespass, poaching, cattle rustling, etc. what is county people's view?)
- 5) Service provision
 - Were (will personnel and equipment (be) adequate? If not, when was it inadequate? Why was it inadequate?
 - What important changes have occurred (or are anticipated) in their department?
 - staff
 - administrative procedures
 - manner of enforcement
 - source of financing
- 6) What law enforcement changes (or issues) have there been that drew public interest or participation? (e.g., new jail, consolidation of enforcement) Object is to articulate public decision-making, and to discuss sequence of response by community and leaders re: energy-related demands)
- 7) At beginning of growth period, who were the influentials? How (and when) did that change? What was role of energy development?
- 8) Check for changes in extra-local linkage.
- 9) Ask about groups and distribution of growth effects to different groups. Check especially for relationships among groups. Ask if they know representatives from each group that could be interviewed.
- 10) If appropriate, ask personal interview questions:
 - position and history of employment
 - length of residence in community
 - where from
 - family characteristics
 - age
 - sex
 - relationships to energy development

A.1.1.3 Social Service/Public Assistance and Mental Health

- 1) Introduction
- 2) Review growth patterns and causes
- 3) Review agency data structure of agency
 - by type of assistance: total annual expenditures; expenditures per 1,000 population; caseloads; staff levels
- 4) How has demand for service changed? Why? Change in use patterns by long-time residents? Why? Different use patterns by newcomers? Why? How are these reflected in the data?
- 5) Have staff and resources been adequate and available when needed to meet demand? If not, when was problem period? Why was there the problem? How was it

- resolved? Have they received adequate support from state?
- 6) What important changes have occurred (or are anticipated) in the areas of . . . What is their view on source of change? Any data?
 - child abuse and neglect
 - marital discord, spouse abuse, divorce
 - alcoholism
 - 7) What public service/assistance-related changes or issues have there been that drew public interest or participation? Describe outcome, how does that fit into overall decision-making pattern in community? Was there a point (in growth period) when decisions started being made in a new way or by different people?
 - 8) Who were influentials at beginning of growth period? How has that changed? What was energy development's role? Get names of really key individuals re: community actions.
 - 9) What distinguishable groups are there in the community? What are criteria for social differentiation? What are distinctive attributes of each group? How would one characterize relationships between groups? What about prior to growth? (Any particular neighborhoods?) Names of people who could discuss each group.
 - 10) Have groups been affected differently by growth? Especially energy development? What about inflation? How have effects of energy development been distributed among groups? How has that occurred?
 - 11) Demographic characteristics of respondent
 - position and history of employment
 - length of residence in community
 - where from
 - family characteristics
 - age
 - sex
 - relationship to energy development

A.1.2 Group Representatives/General Population

A.1.2.1 Introduction

A.1.2.2 Personal Biography

- 1) Background (family, where lived)
- 2) When came to community
- 3) Educational history
- 4) Occupational history, esp. during 1970's
 - occupational mobility/immobility
 - energy-related employment - how did (would) they get it? entrepreneurial - ask about financing, business style and expansions
- 5) Housing - price or availability

- 6) Family history - school and employment history of spouse; school experience of children
- 7) Service provision - any problems? evaluation -- compare predevelopment with now.
- 8) What recreational/social activities available and used; compare predevelopment (or future) with now.
- 9) Who are their friends, occupation - length of residence, location - how did they become friends? Change during study period?
- 9a) Who are their children's friends?
- 10) How were friends affected by development?
- 11) How about others in the community? What other groups do they see? Were any affected differently? How?
- 12) Have newcomers been accepted as part of the community? Examples of interaction between long-time residents and newcomers; between various groups.
- 13) How do they feel they personally have been affected (or anticipate)?
- 14) How do they feel their neighborhood has been affected (or anticipate)?
- 15) If parents are in community, how have they been affected (or anticipate)?
- 16) What changes have occurred in the community (or anticipate)? What effects have there been from energy development (or anticipate)?
 - change in decision-making
 - change in orientation/focus
 - sense of vitality
 - sense of community purpose
- 17) General satisfaction with expected changes
- 18) If good spokesperson for their group
 - profile of group predevelopment
 - livelihood
 - size
 - location (residential)
 - property ownership
 - demographic characteristics
 - special needs
 - intergroup relationships
 - position in community and relationship with other groups
 - distribution of effects
 - employment and income
 - size
 - demographic characteristics
 - housing
 - facilities/services
 - decision-making
 - relationship with others
 - profile now

A.1.3 Decision-Maker Interviews

The purpose of these interviews is to describe the evolution of community-level response to the demands of growth. In addition to this description, the purpose is to be able to determine how pre-growth community and decision-making characteristics influenced (or will influence) the response pattern and how the modification of the decision-making process has affected (will affect) community-level decision-making both during and after rapid growth. Of particular interest is the role and utilization of legislation, especially legislation developed for impact mitigation.

1. Introduction
2. Review chronology and source of growth (complete Figure 3)
3. Rapid growth creates some major needs and changes in a community. Discuss how the community addressed some of the major ones. Ask about ones already identified, but pursue others they identify.
 - 1) Schools
 - Building new facilities -- how did votes come out on major bond issues? Why? Were they able to raise adequate funds? What were problems? Why did they occur? How were they addressed? Who? Were they solved? Will they occur again next time? What role did state actions/legislation play in response?
 - How did response evolve over study period? How did the changes affect how things are done now? Was there a point when decisions or community response was approached in a new or different way?
 - 2) Housing
 - How did housing response occur? How was it coordinated? What were the problems? (probe financing and zoning and legislation) Why did they occur? How were they addressed? Who? Were they solved? Will they recur next time? Role of state actions-legislation
 - How did response evolve over study period? How do the changes that occurred affect how things are done now?
 - 3) Planning and zoning
 - How and when did formal planning and zoning get started and staffed?
 - What role did it play throughout the study period?
 - What were problems? or key decisions?
 - How did they occur?
 - How were they addressed - by whom?
 - Were they solved or will they recur?
 - What role did legislative actions play?
 - How did response evolve over time? What use was made of legislation? Where did initiative come from? Was there resistance?
 - 4) Public works - discuss major decisions as above
 - 5) Law enforcement - as schools

- 6) Animal control - What have they done? How and why? How successful?
- 7) Review how and when state acts designed to assist with the impacts of energy growth have been used. How important have they been? (e.g., for Wyoming: (1) sales tax (2) farm loan board (3) joint power acts (4) industrial siting (5) severance tax)
- 8) In respondent's opinion, how much local control has (will) the community been (be) able to exercise over the important decisions and actions that affected it during growth period?
 - was prewarning adequate and accurate (information)?
 - cooperation from project sponsor? Describe how and why
 - was uncertainty about reality of development a problem? How, why?
 - been able to work with state in handling problems?
- 9) Clarify their perception of the role and importance of state involvement and of large non-local corporate involvement in the community economy/affairs who initiated? What effect now? Future?
- 10) How has (will) the political leadership and government structure in the community changed? regarding city council, county commission, county chairman of political parties?
 - Have there been any changes as a direct result of energy development?
 - Any that are particularly important to community's response or ability to respond?
 - Have companies participated? How?
 - Have (will) community leaders been (be) willing to address problems and take action? Why not, what was (will be) impediment?
 - Has (will) conflict of interest been (be) important in shaping community response, either in terms of actions taken or public trust/community support?
- 11) If business person or banker:
 - Was there (is there anticipation of) a shortage of financing for either businesses or consumers during the study period? Why? How was (will) it (be) addressed? What effect did (will) it have? Where do locals bank?
 - Has banking structure in the community changed? In what way? Why?
 - Did banking policies and practices change during the study period?
 - What role, if any, did energy companies play in banking, local (vs. non-local) businesses?
- 12) Demographic characteristics
 - occupation and previous employment history
 - length of residence in community
 - origin

- family characteristics (including other relatives)
- age
- sex
- relationship to energy development
- 13) Check to see if they feel any pertinent information has been neglected
- 14) Names of other people to talk to
 - influentials
 - group representatives
 - administrative leaders